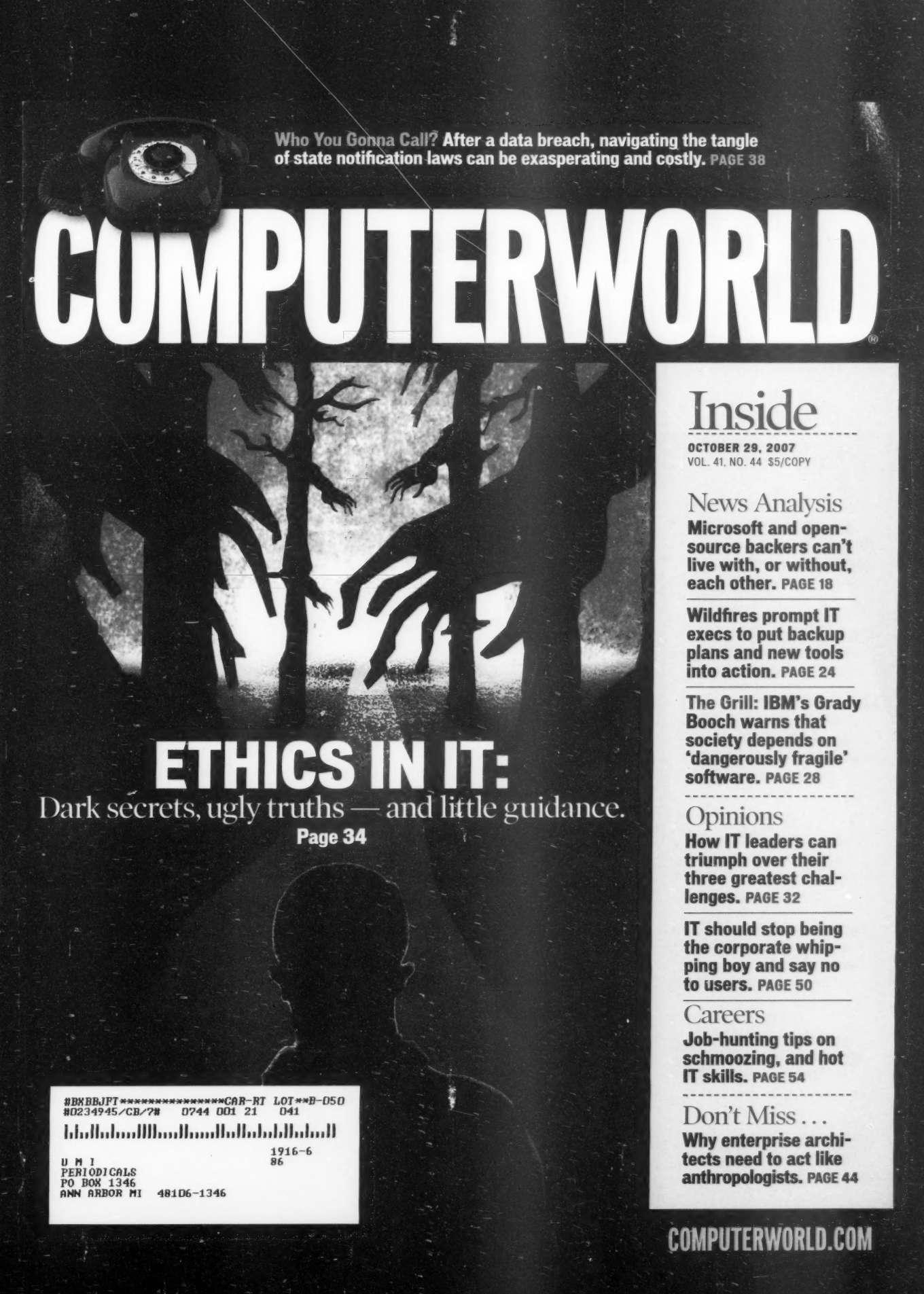

Who You Gonna Call? After a data breach, navigating the tangle of state notification laws can be exasperating and costly. PAGE 38

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ETHICS IN IT:

Dark secrets, ugly truths — and little guidance.

Page 34

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Inside

OCTOBER 29, 2007
VOL. 41, NO. 44 $5/COPY

News Analysis

Microsoft and open-source backers can't live with, or without, each other. PAGE 18

Wildfires prompt IT execs to put backup plans and new tools into action. PAGE 24

The Grill: IBM's Grady Booch warns that society depends on 'dangerously fragile' software. PAGE 28

Opinions

How IT leaders can triumph over their three greatest challenges. PAGE 32

IT should stop being the corporate whipping boy and say no to users. PAGE 50

Careers

Job-hunting tips on schmoozing, and hot IT skills. PAGE 54

Don't Miss . . .

Why enterprise architects need to act like anthropologists. PAGE 44

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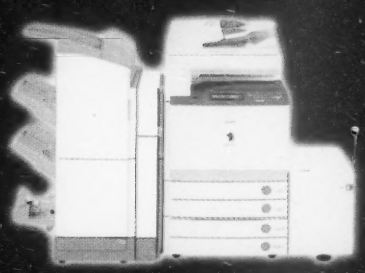

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Inside

COMPUTERWORLD ■ OCTOBER 29, 2007

■ NEWS DIGEST

12 Storage media lost by Iron Mountain held **unencrypted personal data** on Louisiana residents. | Banks claim that **94 million** credit cards were compromised in the **TJX data breach,** double earlier estimates.

14 Court papers reveal that **phishers** conned Supervalu into depositing more than **$10 million** into fraudulent bank accounts. | The U.S. Defense and Veterans Affairs departments still can't fully **share their electronic health records**.

16 Online **ticket sales** for the Colorado Rockies' home World Series games were **suspended** after **the servers** had to be shut down.

■ NEWS ANALYSIS

18 Microsoft and Open-Source Backers Eye Each Other – Warily. The software vendor and the open-source community continue to have a complicated, friend-or-foe relationship.

24 IT Answers Call in California Wildfires. IT execs in affected areas activated backup plans and new emergency-response systems.

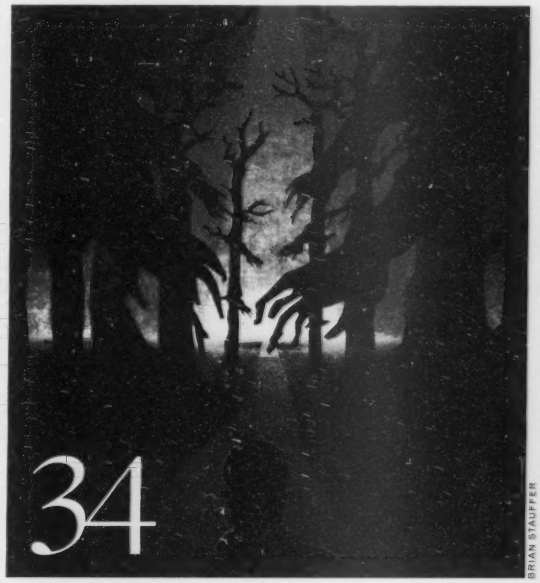
■ OPINION

8 Editor's Note: Don Tennant says feedback on our decision to delete two reader comments from our Web site offers IT pros an interesting lesson.

32 Thornton A. May tells IT leaders how to conquer their three greatest challenges.

50 Paul M. Ingevaldson wants IT to stop being the whipping boy and take its place in the company hierarchy.

60 Frankly Speaking: Frank Hayes thinks TJX was being optimistic, not deceptive, in vastly underestimating the number of customers affected by its data breach.



BRIAN STAUFFER

■ FEATURES

34 Ethics and IT

COVER STORY: IT employees' access to digital information gives them the power to monitor and report co-workers who break company rules – and to break rules themselves. So far, there's little consensus on how to wield that power.

38 Who You Gonna Call?

With more than 30 different state notification requirements for handling a data breach, the potential to make a bad situation worse is huge. Instead of just hoping for the best, companies should be devising a plan.

44 The People Side of IT Architecture

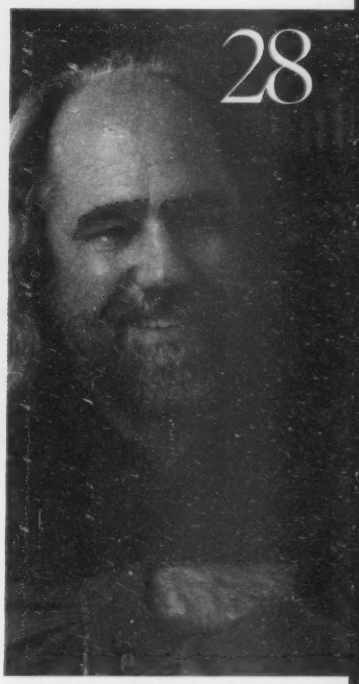
As Con-way's Jackie Barretta (left) found, the key to enterprise architecture is to build a team whose members think less like technologists and more like anthropologists.

COVER: ILLUSTRATION BY BRIAN STAUFFER

■ DEPARTMENTS

26 On the Mark: Information integrity is probably your CFO's top concern, according to a recent survey. **Mark Hall** asks, is it yours?

28 The Grill: Grady Booch, IBM Rational's "free radical," talks about the enduring difficulties of software development, his advocacy of open source and Second Life, and his license to kill.



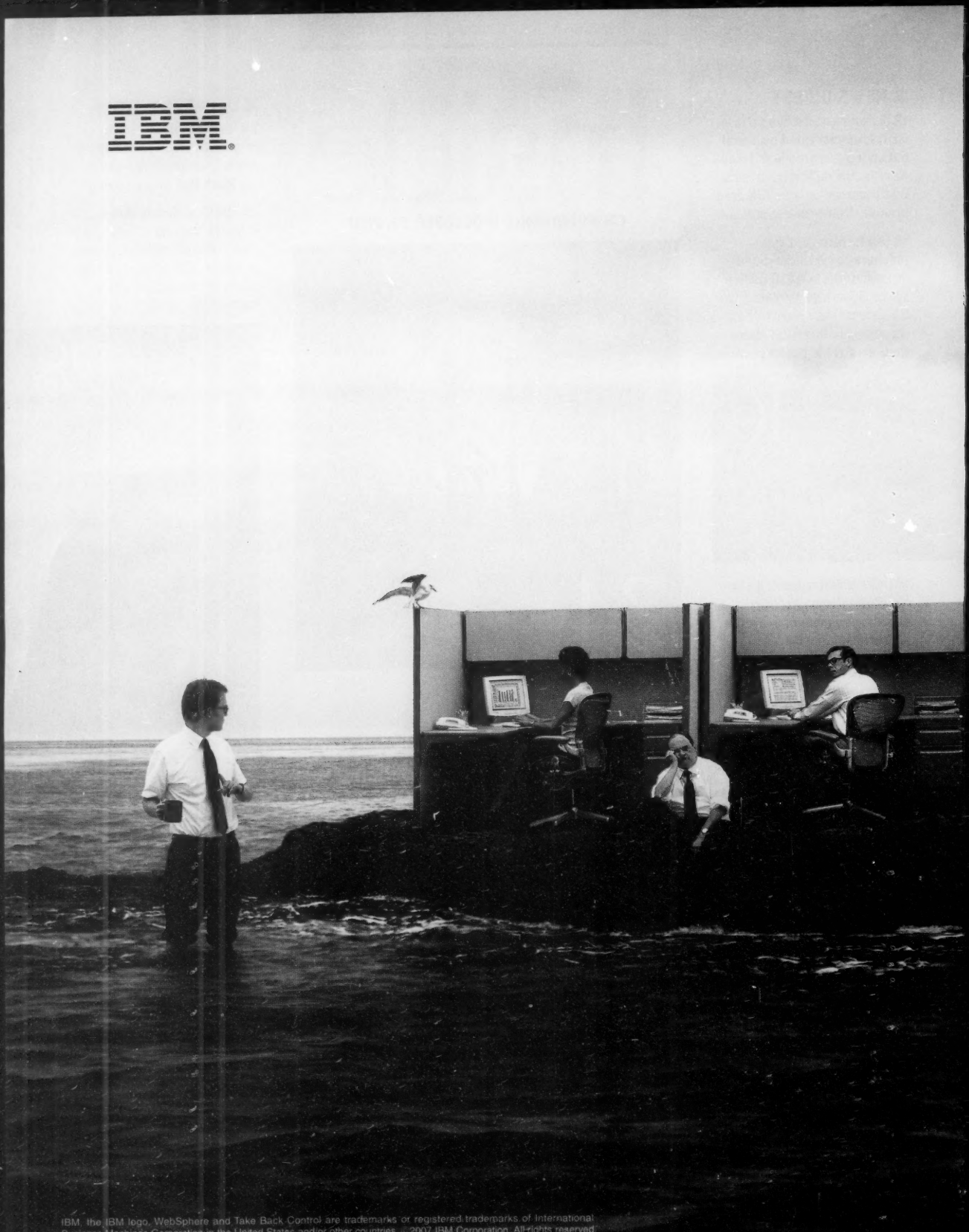
42 Security Manager's Journal: Security Issues Are Everywhere. A security manager's job is never done, but it helps if everyone in the agency has been trained to recognize trouble.

54 Career Watch: Our job-hunting edition has the scoop on networking and more.

58 Shark Tank: User brings his brand-new home PC in to get VPN software, but it runs on the incompatible Windows Vista Home. User isn't clear on the "runs on" part.

■ ALSO IN THIS ISSUE

Letters	10
Company Index	58



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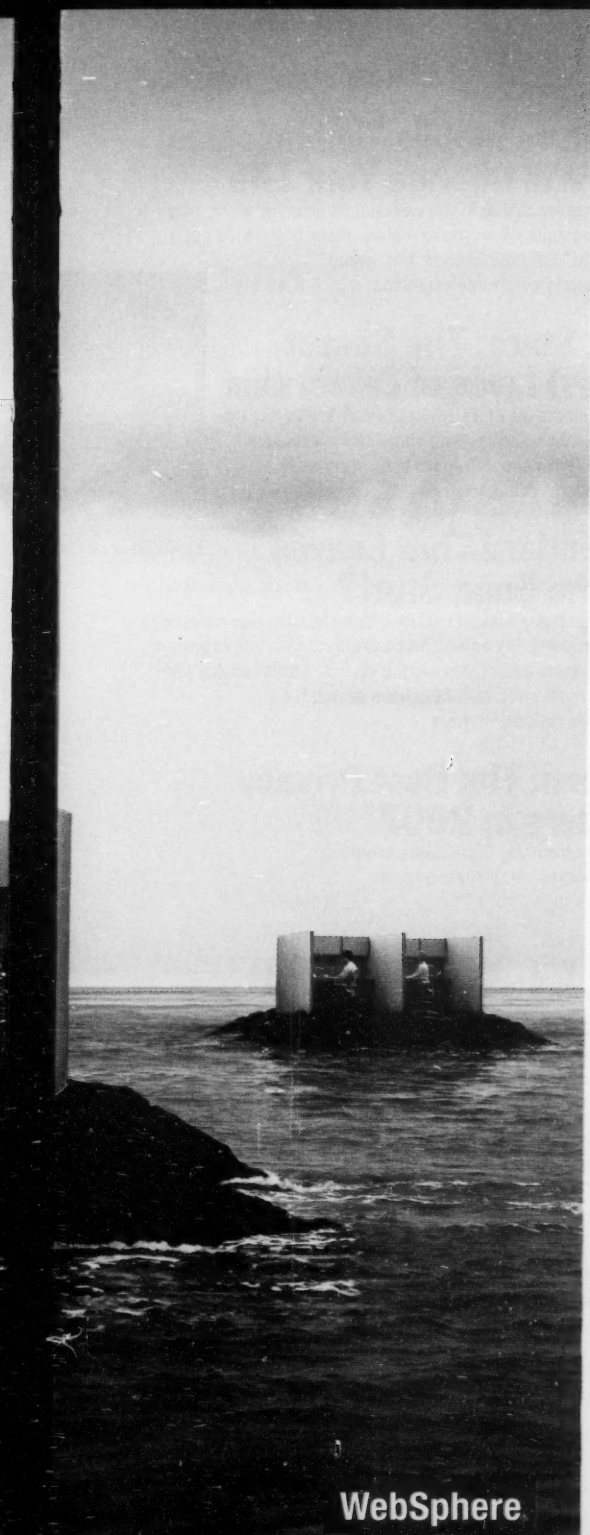

_INFRASTRUCTURE LOG

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This Week Online

Apple Leopard: What You Need To Know

Our in-depth coverage of the eagerly awaited new Mac operating system includes:

■ In Depth: **Apple's Leopard Leaps to New Heights**
After almost two and a half years, the Mac faithful finally have a crack at Apple's latest operating system, Mac OS X 10.5 Leopard. Here's a detailed look at the new features and changes they'll get.

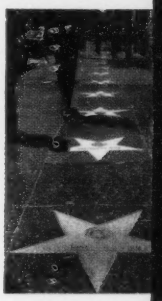
■ What's New in Leopard Server: **The server component of Apple's Mac OS X has been completely made over. We'll tell you what's new, what's different and what to watch out for.**

■ Five Reasons Not to Make the Jump to Leopard – Yet: **Although many Mac users are chomping at the bit to upgrade to the new operating system, not everyone should do so. Here's a guide for those wary of change.**

■ Image Gallery: **A First Look at Leopard**
Take a tour of Mac OS X 10.5's new features, applications and, yes, eye candy.

13 Future Mobile Technologies That Will Change Your Life

These disruptive technologies will change how you work, play and communicate when you're mobile. Many believe it's not a matter of "if" they will happen, but "when."
computerworld.com/mobilewireless



Geek Stars: The Secret (Nerdy) Lives of Celebrities

Who says all the big stars are brainless? We've dug up more than 40 celebrities with some serious science and technology chops. Prepare to be surprised.
computerworld.com/careers

A Standard That Leaves Out the Good Stuff?

The Storage Management Initiative Specification was created to allow interoperability among hardware through a single pane of glass. But users and others say the standard falls far short because the most important APIs have been left out.
computerworld.com/storage

Opinion: The Best Privacy Advisers in 2007

The results from Jay Cline's annual survey.
computerworld.com/itmanagement

Blog Spotlight

Google Wants to Own Your Library

Google wants to make the world's libraries available online – exclusively via its own Web site. Nothing doing, say library consortiums around the globe, opting instead for open-source alternatives, reports Preston Gralla.
computerworld.com/blogs/node/6427

Protecting Against The 'D'oh!' Factor

Security managers can protect their companies against hackers, spammers, viruses and spyware. But who protects a company against its own employees' ignorance? Jaikumar Vijayan blogs about how this vulnerability affected grocery chain Supervalu.
computerworld.com/blogs/node/6420

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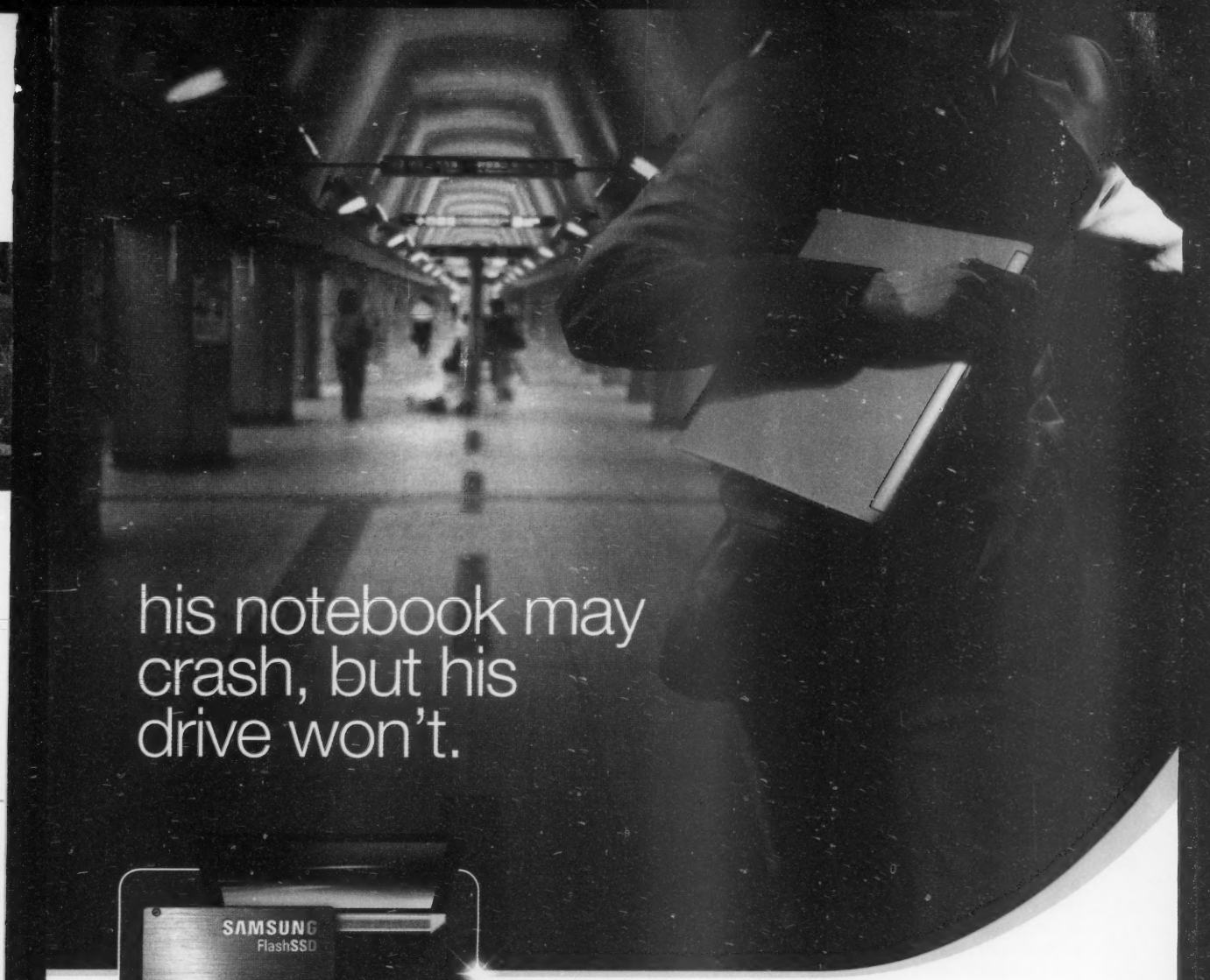
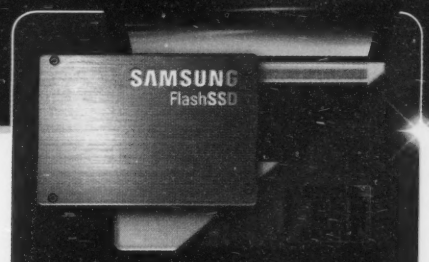


his notebook may crash, but his drive won't.



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[1]Mean Time between Failure
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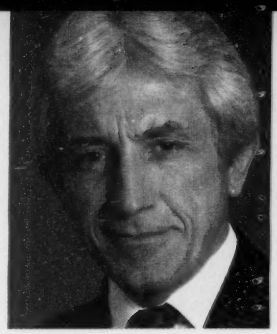
■ EDITOR'S NOTE

Don Tennant

Keeping Our Wits



TWO WEEKS ago in a column titled "Under the Covers," I provided a behind-the-scenes look at some of the issues we face in monitoring reader comments on our Web site and the tough decisions our editors sometimes have to make on whether a comment should be removed.

The case I cited involved the removal of two reader comments in response to "Data Centers Get Religion," a story about unusual locations for data centers, including buildings that were formerly places of worship. I explained that the first comment was removed because it went off topic when the reader used the forum to suggest that others should adopt his religious conviction. I noted that the second reader was off topic because he used the forum to mock that conviction.

Aware that it was a controversial decision because it involved the highly emotional issue of religion, I asked our readers if we made the right call. Interestingly, the respondents were remarkably evenly split.

At this writing, there are 19 comments on our Web site from readers who responded directly to the question. Nine of those readers said we made the right decision; 10 said we did not.

In addition, to date, 26 readers have replied via e-mail. Thirteen said we got it right, 10 said we got it wrong, and three addressed the issue without expressing a view either way.

The exercise demonstrated that the decision was hardly a no-brainer — these aren't easy calls for our editorial umpires to make. It also did something else worth mentioning. And a lot of people aren't going to want to hear it.

It illustrated a point that every IT professional would do well to remember: that well-intentioned people draw erroneous conclusions and make false generalizations if they fail to think an issue through.

Consider this viewpoint I received via e-mail:

"This removal of comments demonstrates a censorship of the natural language of [those] who . . . oppose this discarding of historical ties with formerly Christian institutions. Religious people use religious language to say what we say. For secular persons to discriminate and permit only secular language, even on topics that involve religion, is an affront. . . . The language of persons of faith is by nature personal. Christians do not see Christianity as a theory like perhaps secularists see it. . . . But our view and our language should not be censored."

■ The exercise did something else worth mentioning. And a lot of people aren't going to want to hear it.

This reader not only concludes that the comments were removed by a secularist, but he seems to think that "persons of faith" and "Christians" can be used interchangeably. Those are irrational leaps.

Another reader expressed this view:

"You opened the door for this comment when you 'went there' to draw your readers in with the title. Shame on people of faith if we do not try to address what is going on around us in any way that we can. . . . Everyone else gets to share their view except people of faith. . . . Make you a deal: You stop invoking religion in any of your articles, and we will stop responding to clarify or correct what is being inaccurately conveyed about a very personal issue."

My question to this reader is a simple one: When you say "we," to whom are you referring? All Christians? All people of faith? Then explain this response:

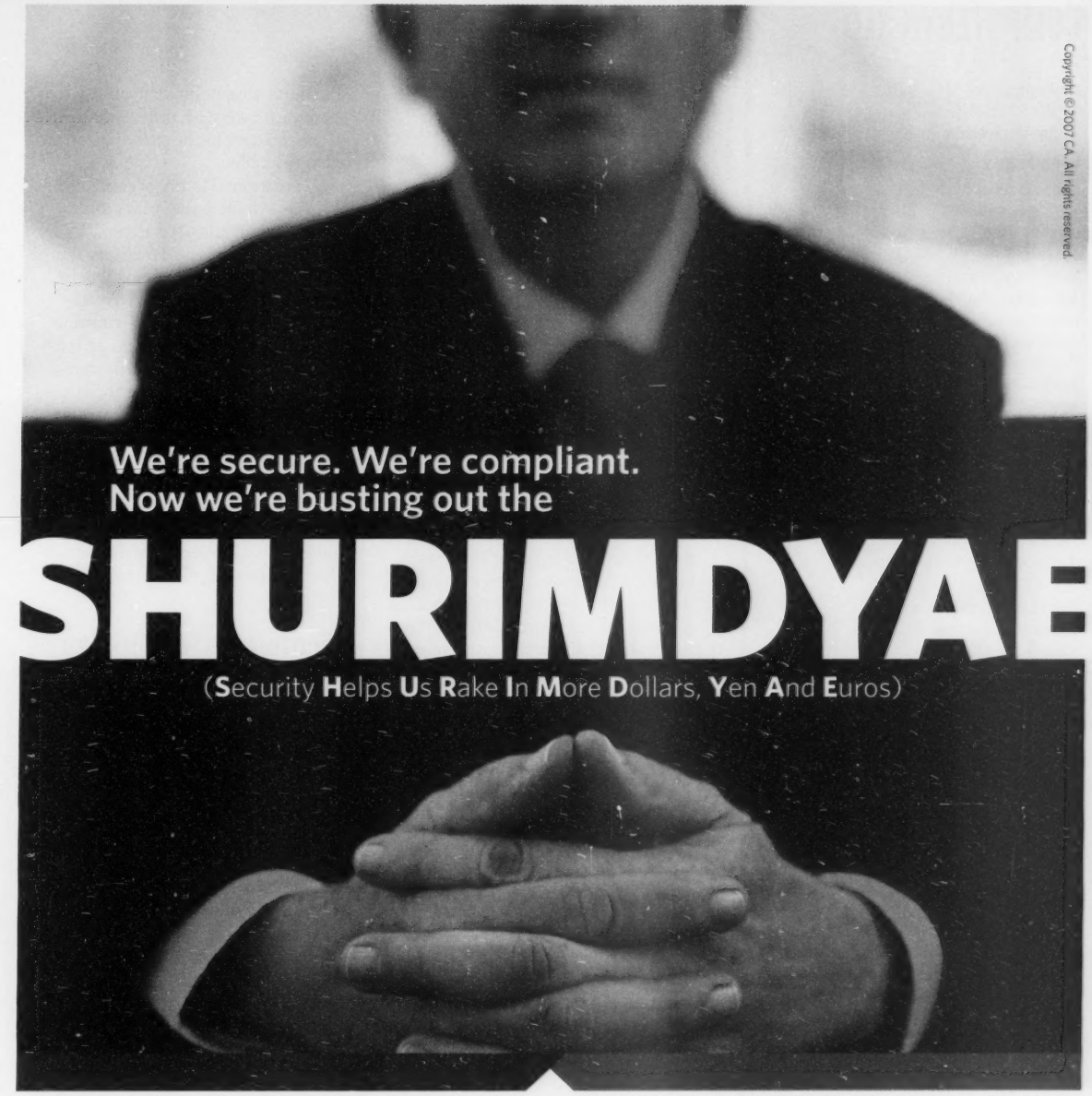
"As a bivocational pastor, I work a full-time job in the IT industry, as well as serve as an associate pastor at my church. . . . I can completely understand and support your decision to remove both of the off-topic posts."

And this one:

"Your forum is not the place for readers to expound on their religious beliefs — that's not what I read *Computerworld* for. And, lest anyone wonders, I'm a lifelong Methodist who would happily pick you up and take you to church with me any Sunday. I'm just not going to force you into my car at gunpoint to do it."

Yes, it's religion, and yes, it's emotional. But we need to keep our wits about us, even when — no, *especially* when — tough, emotional issues arise. ■

Don Tennant *is editor in chief of* Computerworld. *Contact him at don_tennant@computerworld.com.*



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■ LETTERS

Designs on iPhone

You missed the most important thing to change in the iPhone ["15 Things Apple Should Fix in iPhone 2.0," *Computerworld.com*, Sept. 21]: live streaming of video and audio. The iPhone's screen size and resolution are superior to any other mobile device. I would give up any (or all) of the improvements that you mentioned for this one alone, and it would more than make up for the shortfalls with the iPhone I have experienced so far.

■ **Kevin J. Blanchard**, *director, business development, Alexandria, Va.*

After using the iPhone daily for two and a half months, my practical upgrades, ordered by priority: a copy-and-paste function that's universal in iPhone; to-dos that sync with iCal; a landscape keyboard; GPS, via Bluetooth; and video capture (even in a limited amount of, say, 30 seconds).

The others in your article are fine, but they are for a younger, nonbusiness crowd. The 3G thing would be nice, but my EDGE coverage has been good enough for quick e-mail checks and casual surfing. In fact, EDGE's spottiness helps prevent overuse of the iPhone when driving.

■ **Rick Fay,** *president and CTO, Aptos, Calif.*

CIOs Need Many Skills

Since IT has become a mission-critical support service that spans all departments in the enterprise, a business viewpoint for how all these systems interrelate with each other is essential to a CIO's skill set ["The Future CIO May Be a Non-geek," *Computerworld.com*, Oct. 8].

A solid understanding of the company's business model and operations helps when allocating IT resources in alignment with the organization's strategy and initiatives. There are also opportunities to identify and create business value through leveraging the information from multiple systems that might go unnoticed if leaders lack a business viewpoint. The ability to communicate with other organizational leaders in the same jargon is also valuable.

I transitioned to my organization's IT department a few years after receiving my master's in health administration, and I feel that the training I received was critical to some of the changes we have accomplished. I decided to continue my training and will graduate with a master's in information systems this December. I feel that the combination of training I have received plus the experience I have obtained on the job will be invaluable as I work toward one of my career goals of obtaining a CIO-level position.

■ **Carl Dolezal,** *director, IS business operations, University of Texas Medical Branch, Galveston*

E-mail Is Here to Stay

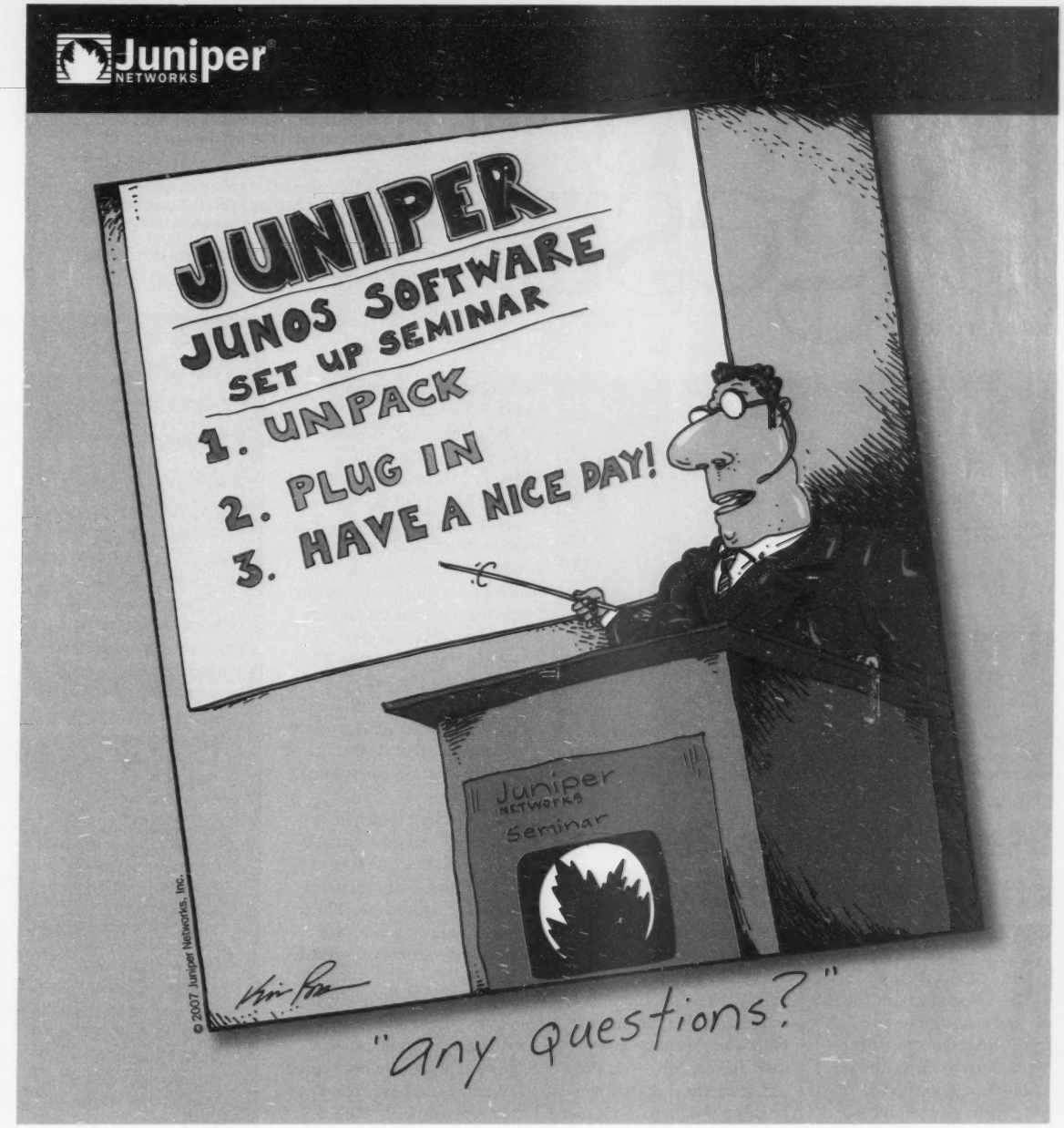
Since the subject of the article "To Improve IT, Consider Ditching E-mail" [*Computerworld.com*, Oct. 9] is a CIO at a government agency, whether she succeeds or fails, the taxpayers fund her silly experiment. E-mail is critical to coordinate the activities of groups whose members operate around the globe. Few organizations have the luxury of face-to-face meetings anymore.

■ **Mark C. Edwards**, *chief scientist, Chubbuck, Idaho*

Expecting Downtime

The most important thing about uptime was buried in the story "Six Objections to Microsoft Office Communications Server" [*Computerworld.com*, Oct. 16]: that Lionbridge Technologies has had 99.88% *scheduled* uptime. That buries the reboots required for patching and other chores that eat into any Microsoft system's uptime. When you only talk about "scheduled" uptime, you make that issue go away — on paper.

■ **Leda McNair,** *DBA/ERP operations manager, Baltimore, Leda_McNair@yahoo.com*



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News Digest

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THE WEEK AHEAD

MONDAY: The Fall 2007 VON Conference and Expo starts in Boston, with a focus on voice on the Net and other IP communications technologies.

WEDNESDAY: The U.S. House Committee on Science and Technology plans to hold a hearing in Washington on environmental and safety issues related to nanotechnology.

THURSDAY: Software vendor CA is scheduled to report its second-quarter financial results.

Iron Mountain says it "encourages" customers to encrypt backup data.

SECURITY

State Data Loss Renews Emphasis on Encryption

THE LOSS OF unencrypted storage media from an Iron Mountain Inc. vehicle last month renewed calls for IT managers to better protect data stored off-site.

The Louisiana Office of Student Financial Assistance (LOSFA) said the unencrypted data lost from an Iron Mountain vehicle on Sept. 19 included the names, birth dates and Social Security numbers of thousands of state residents.

The Port Allen, La.-based state agency administers several scholarship programs and Louisiana's 529 College Savings Plan.

Sue Boutte, assistant executive director and chief operating officer of the agency, last week declined to say whether the unencrypted data was stored on tape or disk drives. However, she acknowledged that "if you trust your data to a courier, then obviously something like this can happen."

According to Boutte, the incident occurred while the agency was working on a plan to encrypt all backup data stored off-site.

"LOSFA was in the process of developing our disaster and recovery plan, but [the loss] occurred before we could get it in place and establish it as a standard plan," she said.

In a statement, Boston-based Iron Mountain blamed the media loss on "a driver [who] did not follow established company procedures when loading the container onto his vehicle." It also noted that the company "encourages" its customers to encrypt backup data.

A similar incident at TD Ameritrade Inc. two years ago prompted the Omaha-based financial services firm to encrypt all of its backup data, an Ameritrade spokesman said.

The backup tapes, later recovered, fell off a conveyor belt and became lost in a shipping facility of an undisclosed contractor. Those tapes contained personal data on 200,000 Ameritrade clients.

After the incident, "we re-evaluated our processes and procedures, and from that point forward, we encrypted [all data] and have taken that extra level of protection," the spokesman said.

Brian Babineau, an analyst at Enterprise Strategy Group Inc. in Milford, Mass., said that IT managers who don't encrypt data are "not doing their jobs. Organizations need to understand that encryption is a necessity and not a luxury anymore."

— Brian Fonseca

SECURITY

Update: TJX Victim Tally Rises to 94M

About 94 million payment cards were compromised in a data breach of The TJX Companies Inc.'s systems, more than double the retailer's earlier estimates, according to papers filed last week in federal court in Boston.

TJX Breach Figures

Payment cards affected
Overall: 94M
Visa cards: 65M
MasterCards: 29M

Losses blamed on breach
Visa cards: $68M to $83M
MasterCards: Undisclosed

SOURCE: DOCUMENTS INCLUDED IN LAWSUIT FILED BY SEVERAL BANKS AGAINST TJX

Framingham, Mass.-based TJX had disclosed to the U.S. Securities and Exchange Commission in March that the breach, discovered early this year, affected 45 million cards.

The latest estimate was made by a group of banks looking for approval to file a class-action lawsuit. The suit would seek recompense for losses from the breach.

TJX officials declined to comment.

In an affidavit, the bankers said that "TJX continues to downplay the seriousness of the situation."

– JAIKUMAR VIJAYAN

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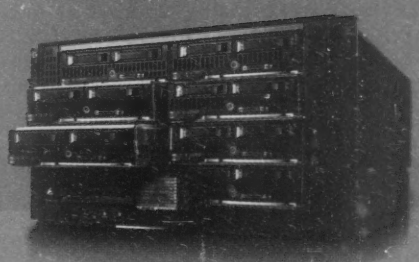

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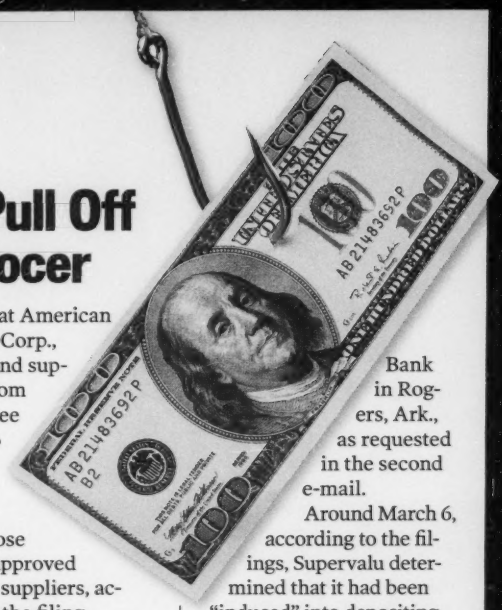
SECURITY

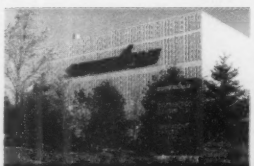
Phishers Nearly Pull Off $10M Scam of Grocer



JUST LIKE unwary individuals, large corporations can sometimes get suckered by devious phishers into parting with money.

For example, grocery chain Supervalu Inc. earlier this year was conned into depositing more than $10 million into two fraudulent bank accounts before it discovered the ruse.

Details of the incident are contained in documents filed in federal court in Idaho in connection with a case seeking to determine ownership of the funds.



Supervalu obeyed e-mails telling it to transfer payments to new bank accounts.

In the filing, Stephen Kilgroff, vice president of legal affairs at Eden Prairie, Minn.-based Supervalu, said the fraud took place in late February and early March.

On Feb. 26 and 28, he said, the company received two fraudulent e-mails — one purporting to be from an employee at American Greetings Corp., and a second supposedly from an employee at PepsiCo Inc.'s Frito-Lay Inc. unit. Both of those firms are approved Supervalu suppliers, according to the filing.

Both fraudulent e-mails sought to get Supervalu to send future payments to new bank accounts.

Between Feb. 28 and March 3, Kilgroff's filing said, Supervalu deposited more than $6.5 million via multiple wire transfers to an HSBC Holdings PLC account listed in the fake American Greetings message.

And on March 2, Supervalu said it made eight separate wire transfers totaling $3.6 million to First Security Bank in Rogers, Ark., as requested in the second e-mail.

Around March 6, according to the filings, Supervalu determined that it had been "induced" into depositing money into bogus accounts, and quickly notified federal law enforcement, which then recovered most of the money before it could be withdrawn by the scammers.

In an e-mail, a spokeswoman for Supervalu acknowledged the fraud but noted that "due to our internal controls and processes, we were able to quickly discover and report this to the FBI. As a result of the quick work of the Boise FBI office and the U.S. Attorney, any funds lost are minimal."

The company declined to comment further on the incident.

— *Jaikumar Vijayan*

Short Takes

Following its $6.7 billion bid to buy BEA Systems Inc., Oracle Corp. late last week rejected the middleware firm's $8.3 billion counterproposal. The database vendor termed BEA's asking price "impossibly high" for it or any other company to pay.

Cisco Systems Inc. has agreed to buy Navini Networks Inc., a developer of WiMax broadband wireless access systems, for $330 million in cash. Navini will become part of Cisco's wireless networking business unit when the deal closes in January.

Intel Corp. has agreed to pay $250 million to settle a year-old patent dispute with rival chip maker Transmeta Corp. The agreement grants Intel the right to license Transmeta patents for use in future products.

In filings with the U.S. Bankruptcy Court in Delaware, The SCO Group Inc. disclosed that it may soon sell its steadily declining Unix business to investment firm JGD Management Corp. for $36 million.

DOD, VA Not Fully Engaged on E-health

WASHINGTON – After nine years of work, the U.S. Department of Defense and the U.S. Department of Veterans Affairs are still unable to share the full electronic health records of military personnel and veterans, officials from the agencies told a congressional committee last week.

The DOD and the VA have begun to share some text records, including discharge summaries and emergency room reports. But they won't be able to exchange information such as the vital signs, laboratory data and family histories of patients until sometime next year, said Dr. Gerald Cross, principal deputy undersecretary of health at the VA.

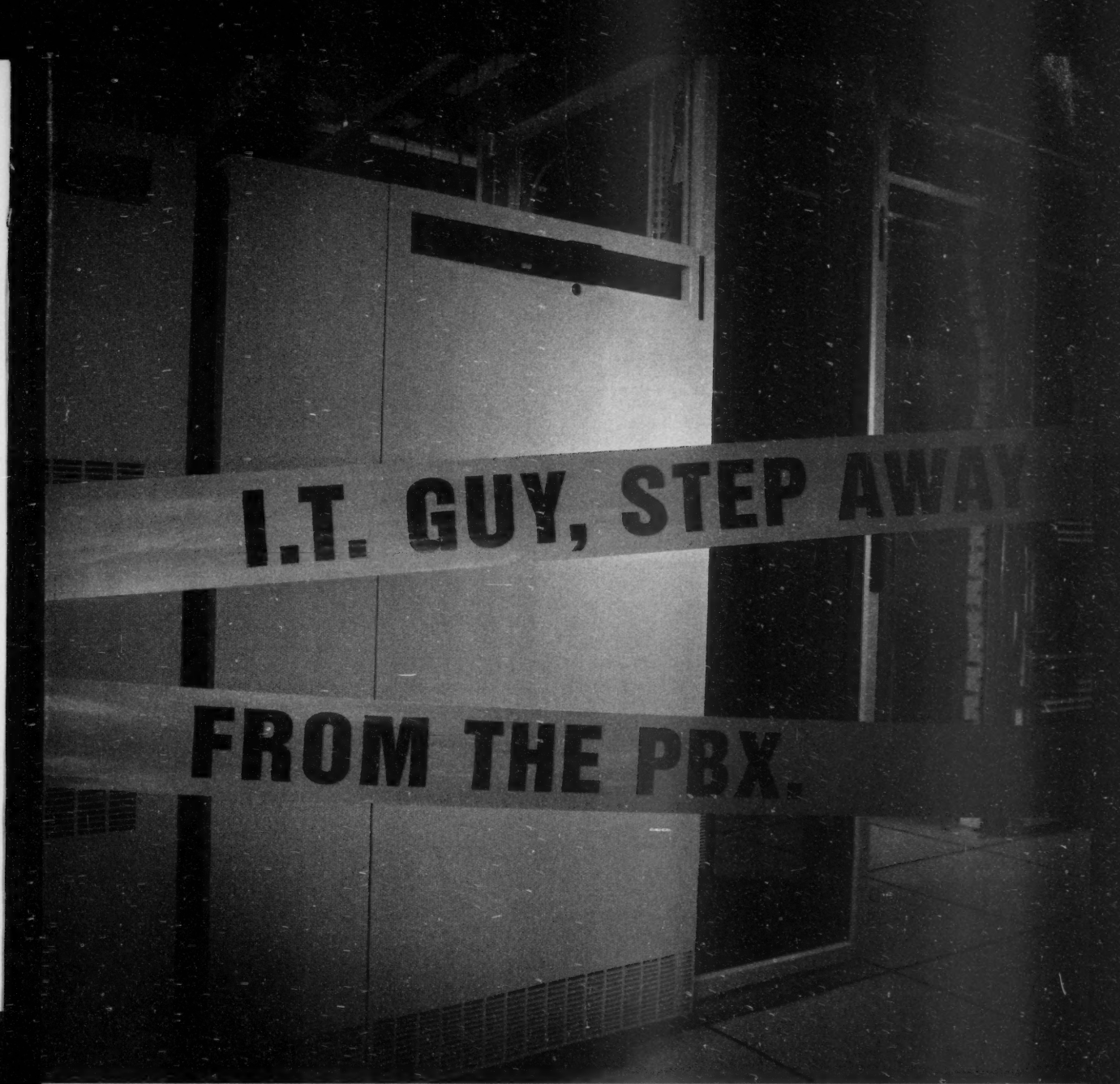
"The work to make data computable between two different health care systems is very complex and requires complete standardization of data," Cross told the oversight subcommittee of the U.S. House Committee on Veterans' Affairs.

Valerie Melvin, a director at the U.S. Government Accountability Office, said that the GAO has yet to see from the two agencies a comprehensive plan for sharing their e-health records. She added that the amount of data currently being exchanged is "limited" and that the DOD and VA still have "significant work" to do on the project.

But agency officials expressed optimism, saying that they expect to be able to share all of their e-health data within the next 12 months.

"We are all working toward the same end," said Dr. Stephen Jones, the DOD's principal deputy assistant secretary for health affairs.

– GRANT GROSS, IDG NEWS SERVICE



Some things are better left alone.

Before you start that big transition to VoIP, hold the phone. It may not be the grand reconstruction project they've been talking about. Simply stated, it isn't about ripping and replacing or big, upfront costs. That's because it isn't about hardware. It's actually about software. Now you can keep your hardware—your PBX, your gateways, even your phones. Move to VoIP with software. Software that integrates with Active Directory,® Microsoft® Office, Microsoft Exchange Server, and your PBX. Maximize your current PBX investment and make it part of your new software-based VoIP solution from Microsoft. It's big change, without changing it all. Learn more at microsoft.com/voip

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SERVERS

System Woes Send Rockies to Shower on Ticket Sales

DoS attacks led to a server shutdown that halted ticket sales for World Series games in Denver.

AN ONLINE SALE of World Series tickets by the Colorado Rockies got an early hook last Monday after the baseball team's automated ticketing vendor had to shut down its servers.

Shaw Taylor, marketing director at Paciolan Inc., said the Irvine, Calif.-based ticketing company's systems experienced "an outage" that began about 10 minutes after tickets went on sale for the Rockies' home games against the Boston Red Sox at Coors Field in Denver.

Only about 500 tickets were sold for the games before the servers were taken offline, according to Taylor. He said the outage lasted for 90 minutes and affected all of Paciolan's clients, which include about 550 sports teams, museums and performing arts centers.

Paciolan CEO Dave Butler said later in the week that the company had never been forced to shut down a sale before. But, he explained, its servers were hit by a pair of denial-of-service attacks that the company's Cisco firewalls couldn't block. Paciolan decided to unplug the systems and add new filters to the firewalls, Butler said.

The Rockies and Red Sox were scheduled to play Games 3 and 4 of the World Series at Coors Field over the weekend, with Game 5 set for tonight, if necessary.

Some online readers of *Computerworld* complained that the system still wasn't working properly when ticket sales resumed last Tuesday. But Butler said that was a case of 750,000 or so would-be ticket buyers being put in a virtual waiting room because only 52,000 seats were available.

— *Todd R. Weiss*

BETWEEN THE LINES *By John Klossner*

LAST WEEK

Microsoft Corp. said it will buy a stake in Facebook Inc. for $240 million in a deal that values the social networking firm at $15 billion.

MySQL AB confirmed that it plans to include code developed by Google Inc. in future versions of its open-source database. Google uses MySQL and has customized the software extensively.

ONE YEAR AGO: Online brokerages ETrade Financial Corp. and TD Ameritrade Holding Corp. disclosed that overseas hackers had broken into some customer accounts, resulting in losses of at least $22 million.

Global Dispatches

EC Ruling Ends Microsoft Appeal

BRUSSELS – Microsoft Corp. last week dropped its outstanding appeals of European antitrust rulings after the European Commission announced that the company is now in compliance with the EC's 2004 ruling.

Microsoft last year had appealed a €280.5 million ($402 million U.S.) fine imposed by the EC for failing to provide interoperability protocols to rivals, as required in the commission's 2004 antitrust ruling. The company had also appealed the EC's demand that it make the protocols available to software developers.

Erich Andersen, European general counsel for Microsoft, said that the company will now "focus all of our energies on complying with our legal obligations and strengthening our constructive relationship with the European Commission."

Paul Meller,
IDG News Service

HP to Buy Mideast Systems Integrator

MANAMA, BAHRAIN – Hewlett-Packard Co. last week agreed to acquire systems integrator Atos Origin Middle East, based here, as part of an effort to expand its services operation in the region.

HP did not disclose the terms of the deal for privately held Atos, but it did note that the firm is not related to Paris-based Atos Origin SA, another systems integration company.

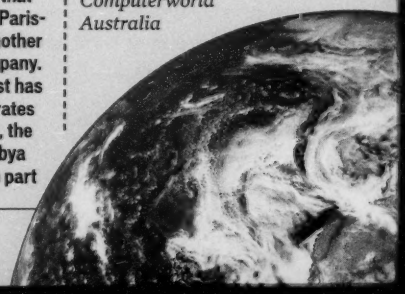
Atos Origin Middle East has 450 employees and operates in Saudi Arabia, Bahrain, the United Arab Emirates, Libya and Qatar. It will become part of HP's Middle East and Africa subregion services business, said an HP spokeswoman.

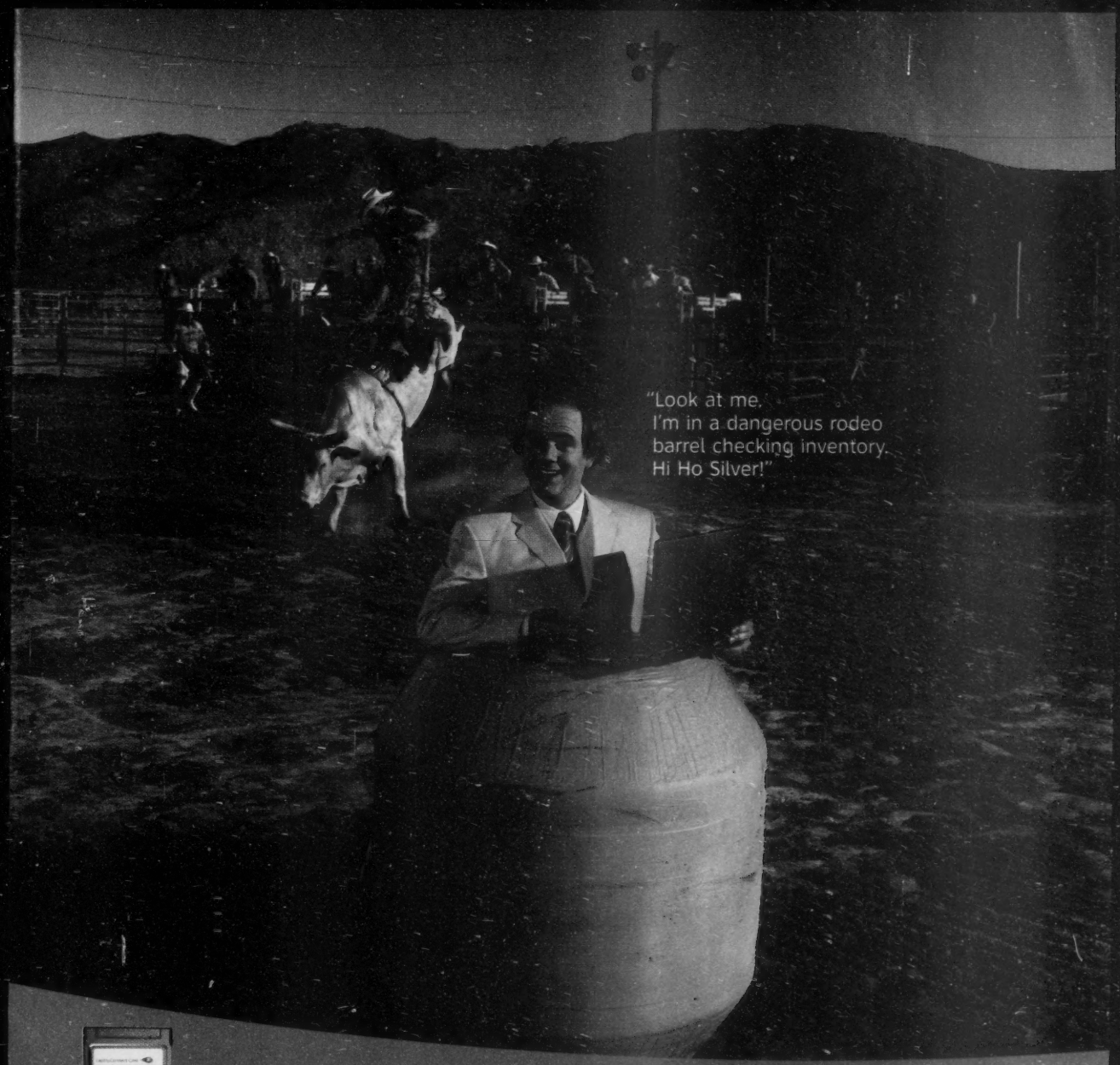
Agam Shah,
IDG News Service

BRIEFLY NOTED

The Victoria Department of Education and Early Childhood Development in Melbourne, Australia, has signed a $23 million Australian ($21 million U.S.) contract with Commander Communications Ltd. in Sydney to install Vista, Office 2007, Windows Server 2008 and SQL Server on computers in 1,600 schools and offices.

Darren Pauli,
Computerworld Australia





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Microsoft and Open-Source Backers Eye Each Other – Warily

Despite new overtures, the two sides remain 'frenemies' — sometimes friends, sometimes foes. By Eric Lai

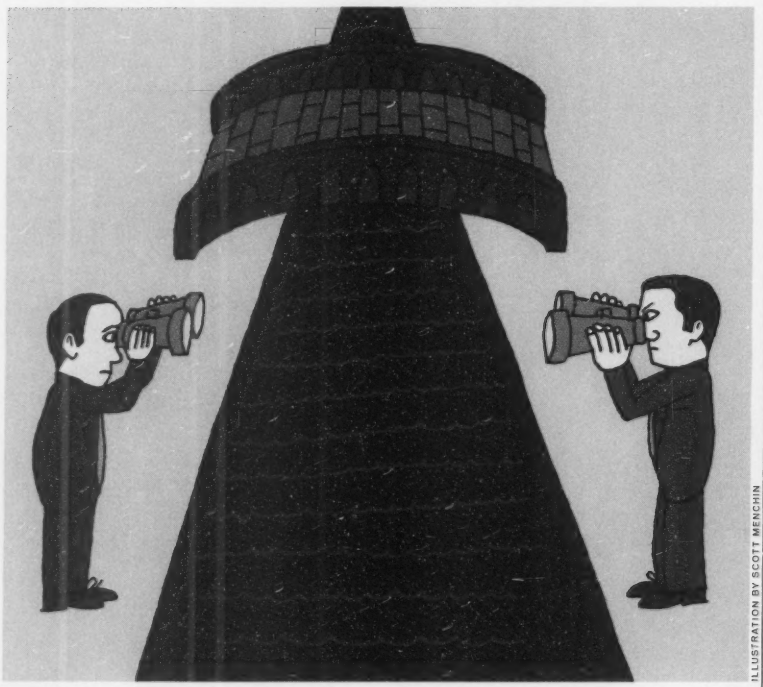

ILLUSTRATION BY SCOTT MENCHIN

THERE'S A SCENE in the 2004 movie *Mean Girls* in which the most popular girl in the film's fictional high school finds out that a friend who now is a fast-rising social rival plans to throw a party without inviting her.

"Who does she think she is?" sniffs the suddenly threatened clique leader — or "Queen Bee," in the movie's parlance. "I, like, 'invented' her, you know what I mean?"

Take away the Valley Girl lingo and substitute "open source" for "she," and you have an approximation of Microsoft Corp. CEO Steve Ballmer's declaration almost exactly one year ago that Linux (playing the role of the movie's "Wannabe") "uses our intellectual property."

Ballmer's statement — along with follow-up claims by Microsoft executives that they had found violations of 235 patents in Linux and other open-source software — caused a sudden refrosting of what had been a slowly thawing relationship between the company and the open-source community.

In recent years, Microsoft, whose combative CEO once called Linux a "cancer" from an intellectual property standpoint, has set up its own open-source testing lab, begun hosting open-source projects on its CodePlex Web site and signed partnership deals with various open-source vendors.

But by dangling the threat of patent-infringement lawsuits over the heads of users and vendors alike, "Microsoft opened up a can of worms with the open-source community that they have been attempting to close since then," said Charles King, an analyst at Pund-IT Inc. in Hayward, Calif.

So wary "frenemies" the two sides remain. And their friend-or-foe relationship has continued to evolve in both directions this month.

Microsoft did finally get an invitation of sorts to the open-source party on Oct. 10, when the Open Source Initiative (OSI) approved two of its software licenses as a valid means of distributing open-source technologies.

The company also continues to try to ingratiate itself with open-source backers. At the Web 2.0 Summit in San Francisco, Ballmer vowed to "do some buying of companies that are built around open-source products."

And last Monday, Microsoft agreed to give developers of open-source workgroup server products access to Windows interoperability information and to slash the royalties it will charge for using the information from 5.95% of a product's revenue to 0.4%. But that agreement was a grudging one, made to finally comply with a 2004 antitrust ruling by the European Commission.

Microsoft also announced a collaboration and "intellectual property assurance" deal with Turbolinux Inc. last week — the latest in a series of controversial agreements that has split the Linux camp between vendors that have agreed to terms and others that have said they aren't interested in doing so.

Nobody thinks Microsoft has dis-

Continued on page 20

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Continued from page 18
placed IBM as the BFF — best friend forever — of open-source vendors.

King, for one, remains skeptical about Microsoft's intentions. The company "is endeavoring to be friends with customers that are purchasing heterogeneous computing solutions and using Linux," he said. "However, I'm not sure that makes them a friend of Linux." And, he noted, Microsoft's patent claims are still an issue.

But Adam Solesby, chief technology officer at StudioNow Inc., a Nashville-based start-up that is developing a Web-based video editing service for consumers and small businesses, said he isn't worried that Microsoft will go after companies like his.

The specter of the software vendor suing users "is not a realistic threat," he said. "I think we're fairly safe from that." Solesby was a longtime Microsoft customer, but his new company uses a MySQL database running on top of a homegrown version of Linux.

SETTING A NEW TONE

Ballmer's comments about buying open-source vendors "set the right tone," blogged Matt Asay, an OSI board member and vice president of business development at Alfresco Software Inc.

"We need a bit more of this side of Ballmer: the rational side that recognizes that Microsoft needs to engage, not estrange, the open-source world," Asay added. "Now it just needs to behave in such a way that open-source companies won't blanch at the thought of being acquired by Microsoft."

■ The specter of Microsoft suing open-source users 'is not a realistic threat,' said Adam Solesby, CTO at StudioNow. 'I think we're fairly safe from that.'

In a blog posting that announced the OSI's approval of Microsoft's so-called shared-source licenses, Michael Tiemann, the open-source group's president, said that the software vendor had submitted the licenses under the same policies and procedures that other parties have used. "Microsoft didn't ask for special treatment and didn't receive any," wrote Tiemann, who also is vice president of open-source affairs at Linux distributor Red Hat Inc.

The Redwood City, Calif.-based OSI received nearly 400 e-mails when Microsoft first announced in late July that it planned to seek open-source certification of its licenses. But since the OSI approved the licenses, it has received "surprisingly few" messages, Tiemann said via e-mail last week, although he added that those sent thus far have all been against the decision.

Bill Hilf, general manager of Windows Server marketing and platform strategy at the software vendor, said in a statement that the OSI's decision was "a significant milestone in the progression of Microsoft's open-source strategy and the company's ongoing commitment to participation in the open-source community." Microsoft said Hilf was on vacation and unavailable for a follow-up interview last week.

"Microsoft appears to have accepted that Linux — on servers and devices at least, if not the desktop — cannot be completely stopped," said Daniel Egger, CEO of consulting firm Open Source Risk Management Inc.

Turbolinux is the seventh Linux vendor to sign a licensing deal that includes a promise by Microsoft not to sue users over patent issues. Novell Inc. was the first last November. It was criticized by many open-source advocates, but the agreement has borne fruit for Novell, which said last month that its Linux sales grew nearly 250% year-to-year in the first three quarters of the fiscal year that ends Wednesday.

Dave Gynn, director of enterprise tools and frameworks at open-source consulting firm Optaros Inc., claimed that such deals are a way for Microsoft "to grab some control of Linux" in order to slow its adoption by users.

The deals also could help to bolster Microsoft's patent-infringement claims — potentially posing legal risks for users of Red Hat and other Linux vendors that haven't signed agreements.

But Egger noted that Microsoft has yet to do anything more than rattle its saber at Linux vendors and users. Meanwhile, two small firms that buy and enforce patents sued Red Hat and Novell earlier this month — a development that Egger said was "inevitable," Microsoft or no Microsoft. ■

Friend or Foe?

Key developments between Microsoft and the open-source community over the past 12 months

November 2006: Microsoft agrees not to sue Novell's Linux users in return for a share of the latter's open-source revenue; CEO Steve Ballmer claims that Linux "uses our intellectual property."

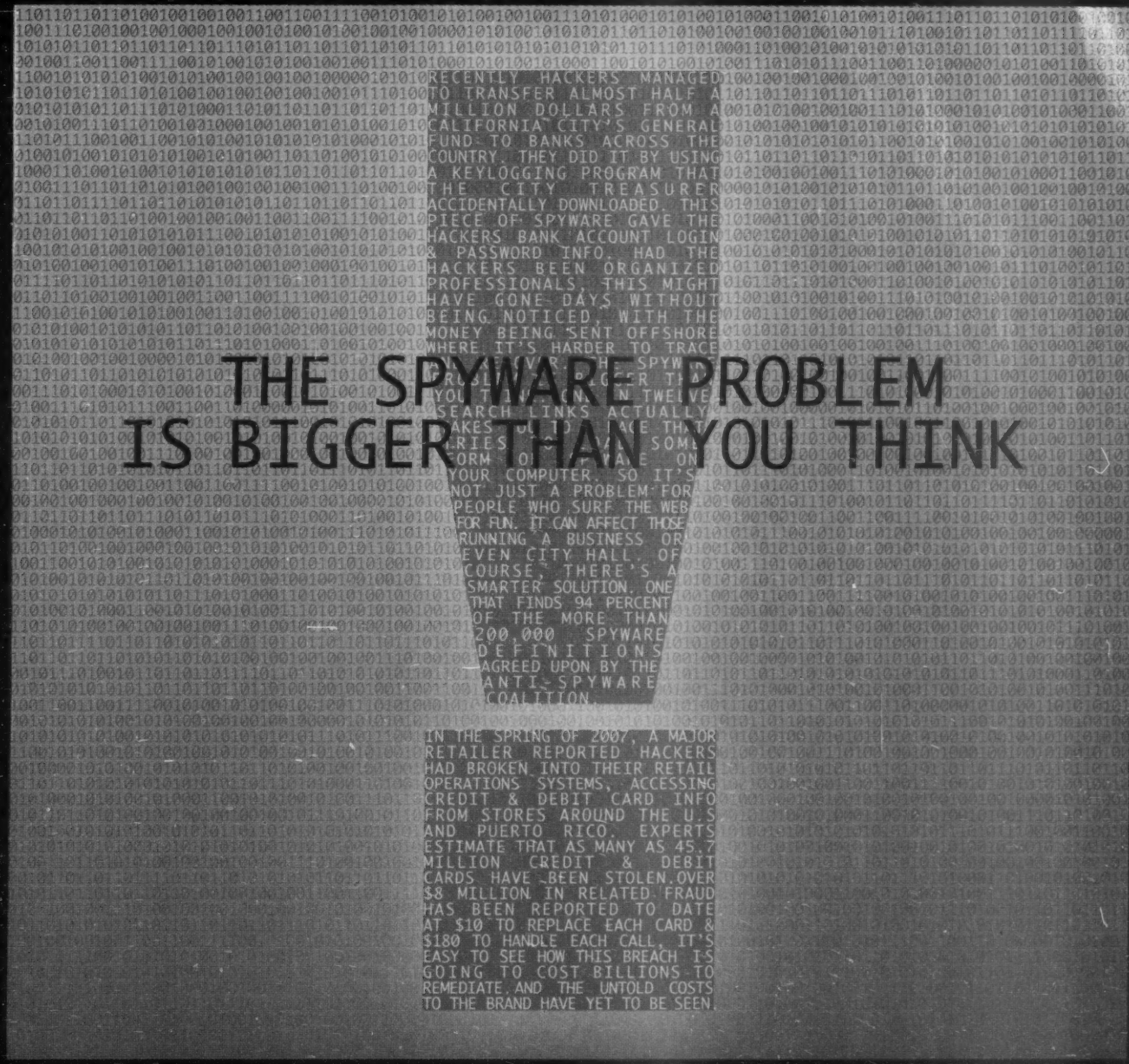
May 2007: Microsoft executives assert that Linux and other open-source technologies infringe on 235 of the company's patents.

June 2007: Three Linux vendors say they won't sign licensing deals similar to Novell's with Microsoft, but two others – Xandros and Linspire – agree to terms.

August 2007: Microsoft submits two of its "shared-source" software licenses to the Open Source Initiative for certification.

September 2007: Novell says its Linux business increased 243% in the first three quarters of its fiscal year, with more than $100 million in sales coming through Microsoft.

October 2007: The OSI approves Microsoft's licenses as a valid means of distributing open-source software; Microsoft later announces another licensing deal, with Turbolinux.


RECENTLY HACKERS MANAGED TO TRANSFER ALMOST HALF A MILLION DOLLARS FROM A CALIFORNIA CITY'S GENERAL FUND TO BANKS ACROSS THE COUNTRY. THEY DID IT BY USING A KEYLOGGING PROGRAM THAT THE CITY TREASURER ACCIDENTALLY DOWNLOADED. THIS PIECE OF SPYWARE GAVE THE HACKERS BANK ACCOUNT LOGIN & PASSWORD INFO. HAD THE HACKERS BEEN ORGANIZED PROFESSIONALS, THIS MIGHT HAVE GONE DAYS WITHOUT BEING NOTICED, WITH THE MONEY BEING SENT OFFSHORE WHERE IT'S HARDER TO TRACE
THE SPYWARE PROBLEM IS BIGGER THAN YOU THINK
YOUR COMPUTER. SO IT'S NOT JUST A PROBLEM FOR PEOPLE WHO SURF THE WEB FOR FUN. IT CAN AFFECT THOSE RUNNING A BUSINESS OR EVEN CITY HALL. OF COURSE, THERE'S A SMARTER SOLUTION. ONE THAT FINDS 94 PERCENT OF THE MORE THAN 200,000 SPYWARE DEFINITIONS AGREED UPON BY THE ANTI-SPYWARE COALITION.
IN THE SPRING OF 2007, A MAJOR RETAILER REPORTED HACKERS HAD BROKEN INTO THEIR RETAIL OPERATIONS SYSTEMS, ACCESSING CREDIT & DEBIT CARD INFO FROM STORES AROUND THE U.S AND PUERTO RICO. EXPERTS ESTIMATE THAT AS MANY AS 45.7 MILLION CREDIT & DEBIT CARDS HAVE BEEN STOLEN.OVER $8 MILLION IN RELATED FRAUD HAS BEEN REPORTED TO DATE AT $10 TO REPLACE EACH CARD & $180 TO HANDLE EACH CALL. IT'S EASY TO SEE HOW THIS BREACH IS GOING TO COST BILLIONS TO REMEDIATE. AND THE UNTOLD COSTS TO THE BRAND HAVE YET TO BE SEEN.

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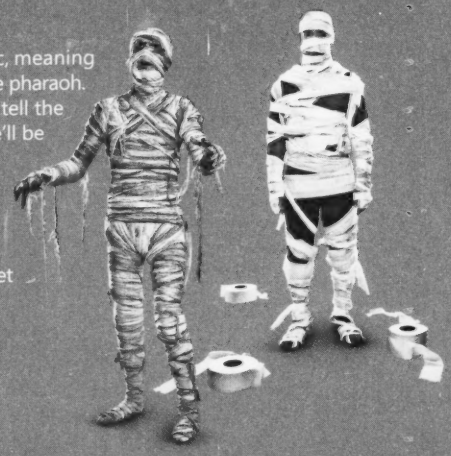
2. Be the Mummy's daddy.
Ancient Egyptian royalty was dynastic, meaning the pharaoh's firstborn child became the pharaoh. Disguise yourself as an older Mummy, tell the Mummy you're his grandfather, and he'll be obligated to do your bidding.



3. Make a torch.
The Mummy, being wrapped in dry linen, is extremely flammable. Make a torch from a rolled-up newspaper and swing it in his direction. You'll get his attention immediately and he'll quickly lurch away.

4. Summon the sun god Ra.
Borrow an ancient staff or a magic ankh. Speak the magic words (almost any will do) to summon the mighty power of the sun god Ra, and stand back, because Ra does not mess around once summoned.

5. Employee of the year.
Remember, in his day, the Mummy was a king, treated like a god, so he's a sucker for attention of any kind. Make a big deal over him, hand him a trophy (any will do, as long as it's gold), and he'll be putty in your hands.

6. Unwind him.
The Mummy is easy to unwind. Sit him in a swivel chair, grab his loose end, and spin. Keep him spinning, make him dizzy, and once you're done, he'll be completely exposed.

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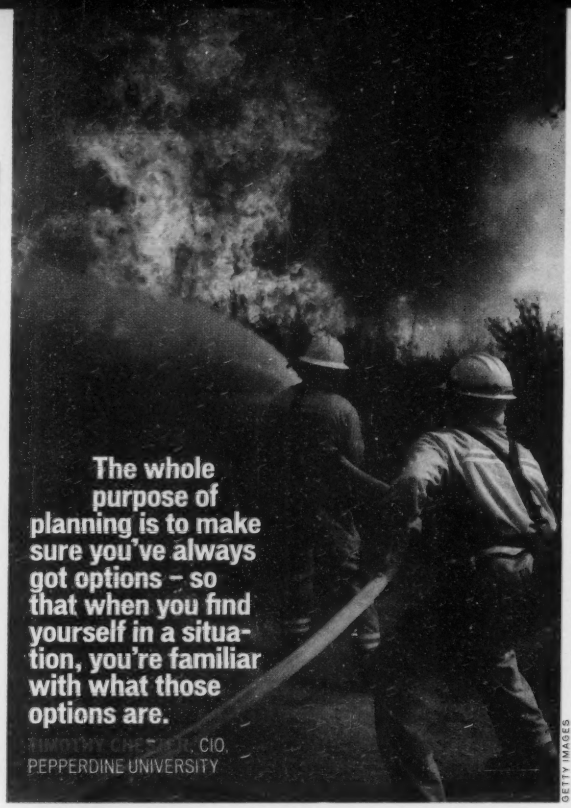
The whole purpose of planning is to make sure you've always got options – so that when you find yourself in a situation, you're familiar with what those options are.
TIMOTHY CHESTER, CIO, PEPPERDINE UNIVERSITY
GETTY IMAGES

IT Answers Call in California Wildfires

Tech execs put backup plans and new systems into action to help cope with massive blazes.

By Patrick Thibodeau

THE FIRST warning that Pepperdine University CIO Timothy Chester had of the wildfire that would threaten the school's Malibu, Calif., campus came when the power went out in his home at 5 a.m. on Oct. 21.

Chester lives on campus and heard his backup power systems switching on that Sunday morning. He quickly headed to Pepperdine's data center, and as he drove, he could see light from the fire — one of the many blazes that ravaged parts of Southern California last week — on the other side of a ridge.

Within hours, brush fires came within 100 feet of the data center. To ensure that the data was protected, Chester and a half-dozen IT staffers who had been paged to come to work put a well-rehearsed contingency plan into effect.

Pepperdine sends its backup tapes to Iron Mountain Inc. for storage. In addition, copies of the latest tape backups were placed in a fireproof safe. The school's ERP applications were shut down as a precaution, and the hard drives were removed and safely stored.

Chester said it took just 35 minutes to do all of that work, which was completed before 8 a.m. As the day wore on, firefighters managed to keep the flames away from the data center, and the facility never went offline. But it was important to be prepared for the worst, according to Chester.

"The whole purpose of planning," he said, "is to make sure you've always got options — so that when you find yourself in a situation, you're familiar with what those options are, as opposed to having to think them through with very little response time."

In San Diego, massive wildfires burning in and around the city posed a real-world test for technologies that the municipal government had recently installed, including a Web-based system for coordinating emergency response operations and a Reverse 911 system for sending alerts to residents.

Matt McGarvey, San Diego's CIO, said last Wednesday that the new technologies were making a difference in fighting the fires and getting people out of harm's way.

The Reverse 911 system, in particular, was "a real lifesaver during this," said McGarvey, who added that it proved to be "very effective in getting the word out" about the fires.

The city announced the installation of the Reverse 911 system just last month. It can deliver as many as 240,000 recorded messages per hour to households and businesses, using databases of phone numbers from AT&T Inc. along with geographic information system (GIS) mapping capabilities.

The wildfires were also the first major test of a Web-based information management system that was installed last year. The collaboration technology, developed by ESi Acquisition Inc., works similarly to a message board — enabling multiple users to post updates about events. The system can also be used to share files, such as GIS maps of burn and evacuation areas.

The ability to rapidly exchange information gave the city's emergency response coordinators "a lot more situational awareness" than e-mail alone would have, McGarvey said.

But he added that the new system has also created some challenges. Last Tuesday night, a posting erroneously indicated that one of the fires had spread much farther west than expected. McGarvey said the incorrect information prompted city workers to begin preparing for a situation that didn't actually exist.

What's needed, he added, are good processes to minimize the chances of bad information being put to use. ■

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On the Mark

HOT TRENDS ■ NEW PRODUCT NEWS ■ INDUSTRY BUZZ BY MARK HALL

MATTHEW FAULKNER

Get Serious About Info Integrity

MADHAVAN NAYAR isn't surprised that 58% of the 653 members of Financial Executives International who responded to its 2007 survey said their "most pervasive critical technology concern" is information integrity. The CEO of Infogix Inc. in Naperville, Ill., says the top financial executives at large companies understand that "the integrity of information cannot be taken for granted." You'd think IT would have assuaged that concern years ago with sleek systems that run 24/7 and track every cent, incoming and outgoing. But you'd be wrong. Nayar points to several areas where IT puts data integrity at risk, such as ill-conceived or widely ignored change policies for equipment and software. Plus, he notes, many companies have islands of incomplete or isolated information and use lousy data-conversion techniques. Add in IT complexity and security concerns, and it's little wonder that CFOs are worried despite the armies of auditors they command. As Nayar notes, "Auditing is obsolete." He wants the entire industry to go beyond it to address the problem. He suggests formulating rigorous standards to manage information, teaching information integrity strategies in schools and offering certification in that area. And of course, CIOs need to make information integrity their highest priority. Nayar thinks that if they do, they'll have strong support from their CFOs.

Nayar: Information integrity should be a CIO's top priority.

Secure All Code

Most modern software development shops use sophisticated methods and products to discover security holes in their code. For some time, Fortify Software Inc.'s Source Code Analyzer has been one of those tools, helping all manner of programmers who use a variety of integrated development environments, operating systems and languages. The next version, due the first week of December, looks forward by adding ultrahip PHP and JavaScript support, but it also looks backward at the antiquated source code running in your data center. According to Barmak Meftah, senior vice president of products and services at Palo Alto, Calif.-based Fortify, Source Code Analyzer 5.0 will include support for Cobol, Visual Basic and Active Server Pages. He notes that while .Net (which Fortify supports) is tops today among Microsoft users for development, most companies still have plenty of Visual Basic scripts running in their data centers, and some organizations continue to write Visual Basic programs. Meanwhile, Active Server Pages remain littered on Web servers throughout the Internet. And we all know that Cobol programs will never, ever disappear. Fortify's tool starts at $1,200 per developer.

Don't overlook security holes in old apps, warns Meftah.

Cozy Up to Your ISP

Corporate networks must fend for themselves against malware attacks. But Steve Bannerman, vice president of marketing and product management at Narus Inc. in Mountain View, Calif., believes that in the near future, you'll work hand in glove with your Internet service provider on security issues. He says this, in part, because his company's Insight Secure Suite, now used by ISPs to analyze traffic behavior on massive global networks, may soon have hooks behind your firewall to correlate potential malware activity on LANs with similar behavior elsewhere online. By combining the data from companies and ISPs, Bannerman suggests, IT departments could vastly improve their security posture. Though Bannerman thinks it's inevitable that this confluence of security systems will take place, he's vague as to how and when it will happen. ■

Bannerman expects ISP and corporate security systems to be integrated in the future.

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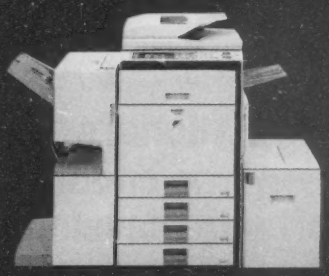

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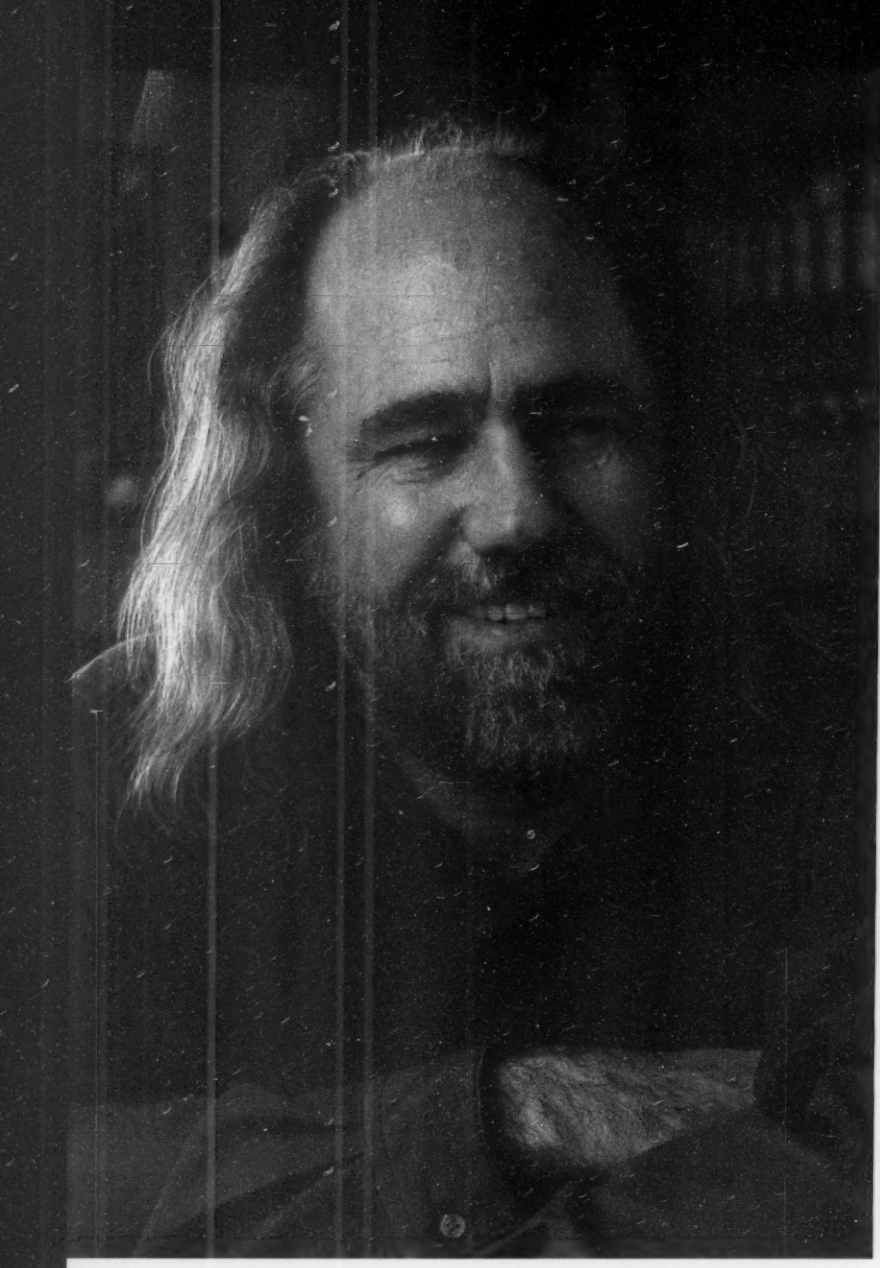


■ THE GRILL

Grady Booch

IBM Rational's 'free radical' talks about the **enduring difficulties of software development**, his **advocacy of open source** and **Second Life**, and his **license to kill.**

Dossier

Name: Grady Booch

Title: Chief scientist, IBM's Rational Software Corp. unit

Location: Littleton, Colo.

Favorite Web site: www.crooksandliars.com

Favorite quote: "She said she usually cried at least once every day, not because she was sad, but because the world was so beautiful and life was so short." – Brian Andreas

Favorite technology he didn't invent and IBM doesn't sell: "The Macintosh. It is a beautiful piece of hardware."

Hobbies: Reading, playing harp, traveling and kayaking

Favorite vice: Chocolate

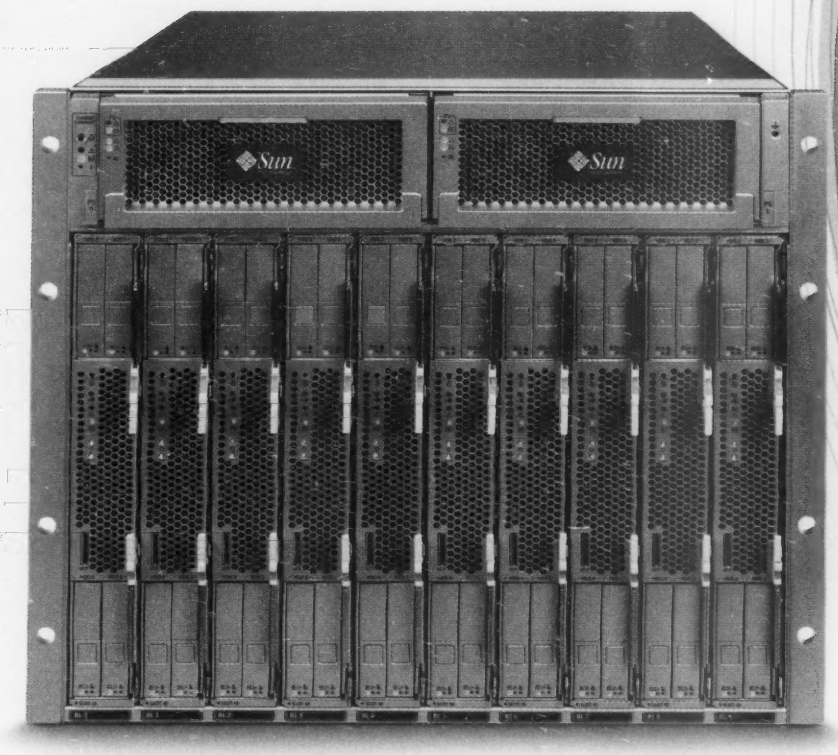
Grady Booch is chief scientist at IBM's Rational Software Corp. unit and an IBM fellow who also holds the title "free radical." His software development approach and the Unified Modeling Language, which he helped create, have been used to build the software that runs pacemakers, avionics in certain large airliners, antilock brake systems, and financial trading systems in the U.S., Europe and Asia.

How would you characterize the state of software development today? Software has been and will remain fundamentally hard. In every era, we find that there is a certain level of complexity we face. Today, a typical system tends to be continuously evolving. You never turn it off, [and] it tends to be distributed, multiplatform. That is a very different set of problems and forces than we faced five years ago.

Traditionally — we're talking a few decades ago — you could think of software as something that IT guys did, and nobody else worried about it. Today, our civilization relies upon software.

All of a sudden, you wake up and say, "I can't live without my cell phone." We, as software developers, build systems of incredible complexity, and yet our end

Continued on page 30



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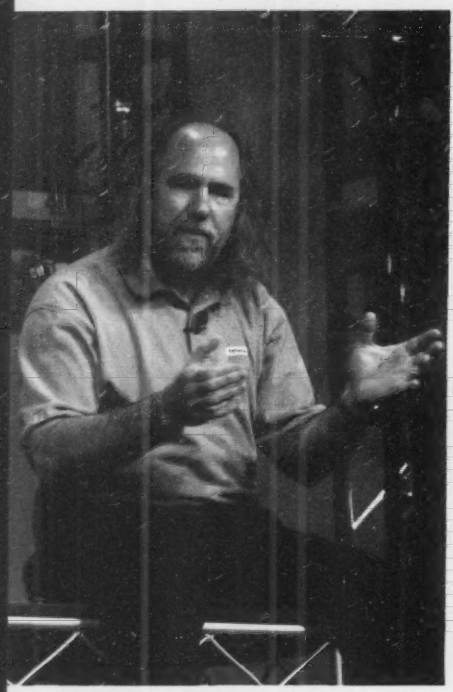


"The OS wars are largely over. Let's decide on a common platform. Therefore, Linux makes sense.

Continued from page 28

users don't want to see that software.

Most of the interesting systems today are no longer just systems by themselves, but they tend to be systems of systems. It is the set of them working in harmony. We don't have a lot of good processes or analysis tools to really understand how those things behave. Many systems look dangerously fragile. The bad news is they *are* fragile. This is another force that will lead us to the next era of how we build software systems.

What have been the biggest advantages from IBM's 2003 acquisition of Rational, and what are some of the drawbacks about being part of IBM? I've got much cooler business cards.

Now, we're dealing with an organization that is two orders of magnitude larger and operating in businesses that [Rational] had no traction in.

It is really cool working with brilliant people. When the acquisition was first consummated, one of my first tasks was to manage the IBM/Rational research relationship. There are some really fascinating things going on there, dealing with static and dynamic analysis and collaboration. We have a team now looking at using virtual worlds for doing distributed software development.

When you have an organization that is 100 times larger, there is a little bit more bureaucracy. [IBM asked me] to destroy bureaucracy. I have a license to kill, so to speak. IBM is a target-rich environment.

What is your take on the effects of increasingly popular open-source projects like Eclipse on programming? Consider where Rational was prior to Eclipse. We had to split our loyalties because there was a variety of IDEs [integrated development environments] that were interesting in the marketplace [and] none had reached critical mass. We worked with IBM to help make Eclipse happen. Now, all of a sudden, Eclipse was the de facto standard. There is no value added in Rational building an IDE.

[Open-source] projects that have really gotten traction represent a codification of things that are commodities. The OS wars are largely over. Let's decide on a common platform. Therefore, Linux makes sense.

Open source represents an economic process where you find some applications you can't make money on, and it makes sense for us as an industry to pool our resources.

You mentioned that you have a Microsoft Windows-less office. What computers do you use? A Macintosh is my main machine. I carry around a Palm TX as well. I am not a "CrackBerry" addict, because I get too much e-mail as it is. In [my home office], a T1 goes to a Linux appliance, which is my hardware firewall. I've got a 2TB file server for backup. We have 17 IP addresses inside [the house]. When I travel, I can look at the security cameras in my house and look in on the cats.

You appeared at the most recent Rational user conference as a Second Life avatar, and you have given some lectures in Second Life. What attracts you to Second Life, and what do you make of some of the more recent defections by companies that have said there are just not enough people in Second Life to make it worthwhile to have a presence there? Virtual worlds are a force multiplier for me. I am under such demand to travel. In my office, I have a videoconferencing system that is still not good enough. It is still just talking heads. I have been able to expand my reach by using Second Life where I could not justify the time and expense to travel.

Maybe those companies [that have left Second Life] got in there for the wrong reasons. Why do I want to go to Store X in a virtual world?

IBM has 50 or so islands that we own [in Second Life]. We've derived business value by using it internally. I can look at the lectures I have done and say, "I have saved IBM money."

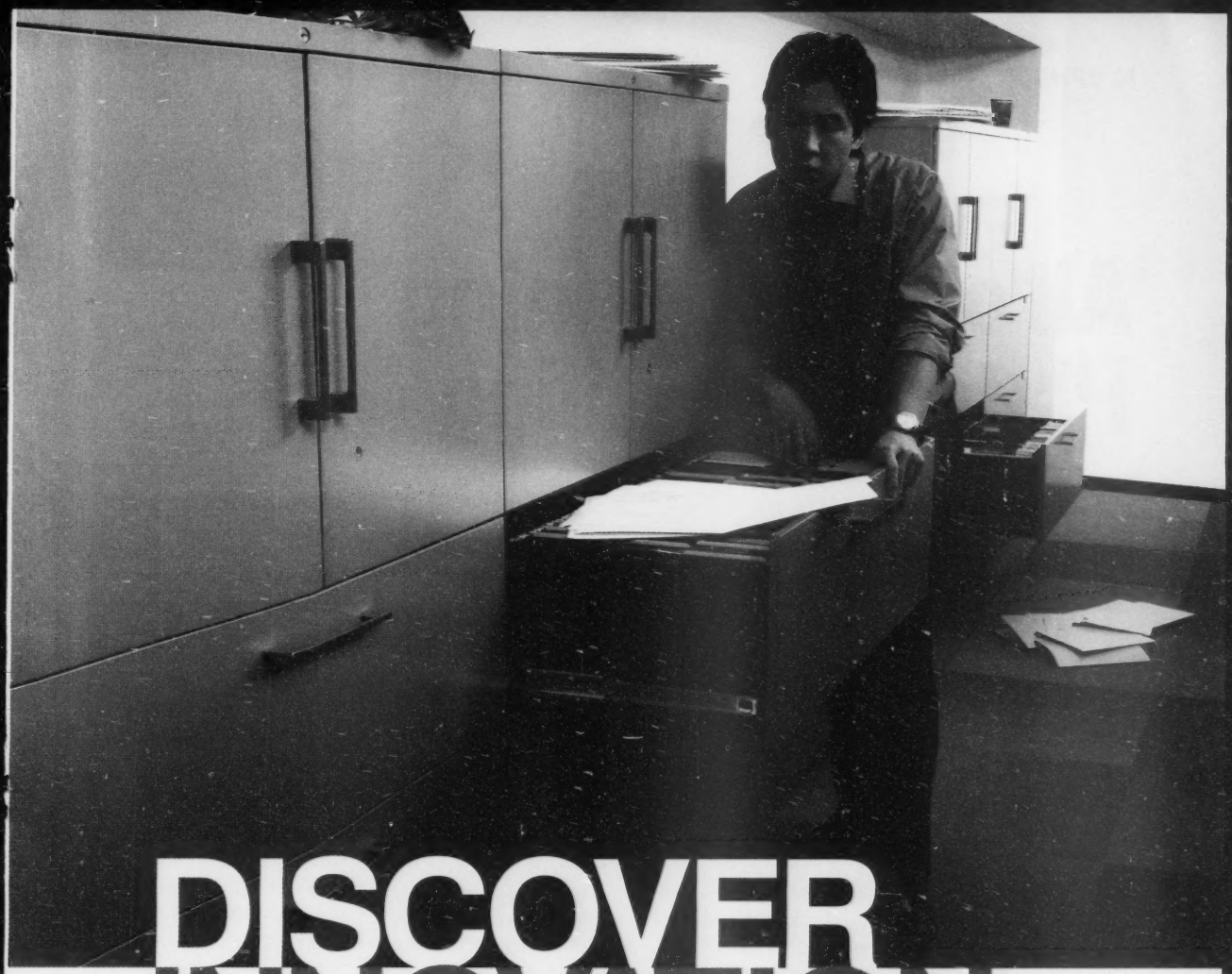
If you were back in the U.S. Air Force Academy [where Booch earned his bachelor's degree in 1977] today, what would you choose to study? I would want to be an astronaut. The economics of that business are so different now. It used to be that NASA and the government had the stronghold on space travel. The generation after us — they're probably going to go to space. Good for them.

What technology development has surprised you the most in the past decade? I am not easily surprised. I will honestly say I am not sure I have been surprised.

I read a heap of history. I am so attuned to the social and historical things that have gone on that I see virtually everything that has happened as evolutionary rather than revolutionary.

I haven't seen any revolutions. Heck, I had my first e-mail address in 1979. There was a printed document with everyone's e-mail address [in the world].

— *Interview by* **Heather Havenstein**



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■ OPINION

Thornton A. May

All of IT's Spinning Plates Are Falling

MANY NEW CIOs slam into an ugly truth at about one month in: The job is too big. There's too much to know and not enough time to learn it. There's too much to do and not enough hands to plug all the holes in the dike. There are too many relationships to be managed and not enough days in the week to manage them.

Thus, we have the recurring sad saga of plate-spinning IT leaders desperately trying to keep enough crockery from smashing into bits to preserve a modicum of job security. So intent are they on this balancing act that they have no way to see that it's doomed.

That's because the three plates that give them the most trouble are already broken. And yet they play a vital role in the equilibrium of all the others. If you could properly repair them, you could spin them innovatively. This would simplify your life, reduce your workload and set you up for a gratifying, less frenzied career, while adding substantive value to the enterprise.

What's on these plates? Three challenges we've never put behind us: how to sell IT, how to develop a world-class staff, and how to communicate activity-based IT costs.

I first encountered all this broken crockery years ago during a boot camp for new CIOs. In Stage 1, Harvard Business School types told the newbies what they could expect. After the newbies had gained some on-the-job experience, they reconvened for Stage 2 to share what they had learned. Stage 3 was to be a discussion of best practices, but we never got that far. Midway through Stage 2, as we listened to stories from the front lines, a hypothesis started to emerge: There was something systemically "off" about the way IT was being done.

■ New CIOs soon see that something is systemically 'off' in the way IT is done.

Since then, I've given a lot of thought to those three big challenges and how to restore some equilibrium to IT. These are my conclusions:

We shouldn't be trying to sell IT at all. Customers should be clamoring for our help. At this point, IT's ability to creatively solve problems should make every line-of-business leader see that they would be crazy not to spend time with us. Customers should be able to tell us which off-the-shelf infrastructure, data and storage components we could combine to give them what they need.

We are only as good as the people in our IT organizations. Most of us, nonetheless, have primitive development programs in place for senior IT staff. Fix this or fail — it's that simple. Your good people will leave, and you won't be able to afford the skills you'll need to buy on the spot market.

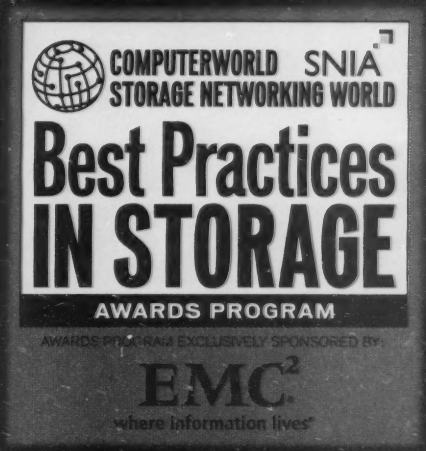
We need a new way to account for what we spend and how we enable the future. Let's be honest with ourselves — many executives don't know what we do. This is unsustainable ignorance that has given rise to a Dickensian IT funding model: Please, sir, may I have some more? It is almost unheard of to be able to fund infrastructure investment — unless a law like Sarbanes-Oxley makes it unavoidable. It is similarly extraordinary for enterprises to fund high-risk technology ventures. Thus, the two pillars of competitive differentiation — innovation and infrastructure — are outside the purview of traditional IT funding models. This is wrong, and it must change.

What are you waiting for? That crockery isn't going to repair itself. ■

Thornton A. May *is a longtime industry observer, management consultant and commentator. You can contact him at thorntonamay@aol.com.*

Congratulations Award Recipients!

Storage Networking World proudly announced the results of the "Best Practices in Storage" Awards Program. This program honors IT users "Best Practice" case studies selected from a field of qualified finalists.



Honoree Award Recipients in each of the following categories were recognized during the Gala Awards ceremony at Storage Networking World in Dallas, Texas, on October 17th:

Innovation and Promise

Alston & Bird, LLP, Atlanta, Georgia

Finalists: America Online (AOL), Dulles, Virginia
Defense Contract Management Agency (DCMA), Alexandria, Virginia
Rice University, Houston, Texas
Southcentral Foundation (SCF), Anchorage, Alaska

Planning, Designing and Building a Strategic Storage Infrastructure

Memorial Sloan-Kettering Cancer Center, New York, New York

Finalists: American Society of Health-System Pharmacists, Bethesda, Maryland
Carolinas HealthCare System, Charlotte, North Carolina
IAC, New York, New York
Weill Cornell Medical College, New York, New York

Selecting and Deploying Storage Networks

US Army Corps of Engineers, Huntington District, Huntington, West Virginia

Finalists: Garland Independent School District, SachseTexas
Lulu Press, Inc., Morrisville, North Carolina
Medtronic, Minneapolis, Minnesota
Rackspace Managed Hosting, San Antonio, Texas

Storage Reliability and Data Recovery

Raymond James Financial, St. Petersburg, Florida

Finalists: Cytec Industries Inc., Waggaman, Louisiana
Databank, Montgomery, Alabama
EFILM, Hollywood, California
Saint Luke's Health System, Lee's Summit, Missouri

Ethics in IT

Dark secrets, ugly truths. And little guidance. BY TAM HARBERT

What Bryan found on an executive's computer six years ago still weighs heavily on his mind. He's particularly troubled that the man he discovered using a company PC to view pornography of Asian women and of children was subsequently promoted and moved to China to run a manufacturing plant. ■ "To this day, I regret not taking that stuff to the FBI," says Bryan. ■ It happened when Bryan, who asked that his last name not be published, was IT director at the U.S. division of a $500 million multinational corporation based in Germany.

The company's Internet usage policy, which Bryan helped develop with input from senior management, prohibited the use of company computers to access pornographic or adult-content Web sites. One of Bryan's duties was to monitor employee Web surfing using products from SurfControl PLC and report any violations to management.

Bryan knew that the executive, who was a level above him in another department, was popular within both the U.S. division and the German parent. But when the tools turned up dozens of pornographic Web sites visited by the exec's computer, Bryan followed the policy. "That's what it's there for. I wasn't going to get into trouble for following the policy," he reasoned.

So he went to his manager with copies of the Web logs (which he still has in his possession and made available to *Computerworld* for verification).

POWER AND RESPONSIBILITY

Bryan's case is a good example of the ethical dilemmas that IT workers may encounter on the job. IT employees have privileged access to digital information, both personal and professional, throughout the company, and they have the technical prowess to manipulate that information.

That gives them both the power and responsibility to monitor and report employees who break company rules. IT professionals may also uncover evidence that a co-worker is, say, embezzling funds, or they could be tempted to peek at private salary information or personal e-mails. But there's little guidance on what to do in these uncomfortable situations.

In the case of the porn-viewing executive, Bryan didn't get into trouble, but neither did the executive, who came up with "a pretty outlandish explanation" that the company accepted, Bryan says. He considered going to the FBI, but the Internet bubble had just burst, and jobs were hard to come by. "It was a tough choice," Bryan says. "[But] I had a family to feed."

In theory, ethical behavior is governed by laws, corporate policy, professional ethics and personal judgment. But as IT pros discover all the time, finding a way through that thorny thicket can be one of the most daunting challenges in their careers.

Perhaps it would ease Bryan's conscience to know that he did just what labor attorney Linn Hynds, a senior partner at Honigman Miller Schwartz and Cohn LLP, would have advised in his case. "Let the company handle it," she says. "Make sure you report violations to the right person in your company, and show them the evidence. After that, leave it to the people who are supposed to be making that decision."

PICKING UP THE SLACK

Ideally, corporate policy takes over where the law stops, governing workplace ethics to clear up gray areas and remove personal judgment from the equation as much as possible.

"If you don't set out your policy and your guidelines, if you don't make sure that people know what they are and understand them, you're in no position to hold [workers] accountable," says John Reece, a former CIO at the Internal Revenue Service and Time Warner Inc. Having clear ethical guidelines also lets employees off the hook emotionally if the person they discover breaking the policy is a friend, a direct report or a supervisor, says Reece, who is now head of consultancy John C. Reece and Associates LLC.

That policy should warn all employees that their PCs are company property, and therefore any information on them is fair game for investigation, says Art Crane, principal of Capstone

Over the Line

In the spring of this year, security vendor Cyber-Ark Software Ltd. conducted a survey in which one-third of 200 IT employees who responded admitted using their administrative passwords to snoop through company systems and peek at confidential information such as salary data. A poll of more than 16,000 U.S. IT practitioners conducted in June 2007 by the Ponemon Institute returned these equally disturbing findings:

- **62% of IT employees polled said they had accessed another person's computer without permission.**
- **50% said they had read confidential or sensitive information without a legitimate reason.**
- **42% said they had knowingly violated their company's privacy, security or IT policies.**
- **32% of the respondents were at or above the manager level, and the average experience level was 8.4 years.**

– TAM HARBERT

ILLUSTRATION BY BRIAN STAUFFER

Services, a human resources consultancy. It should provide clear instructions on what to do when employees encounter a violation of the policy, including guidance on how to bring it up the chain of command. It should also have whistle-blower provisions that protect employees from retaliation.

But many corporate policies are ill defined, fail to keep up with new technologies and are poorly communicated to the IT department.

That's partly because ethics policies are typically defined by an organization's lawyers or regulatory compliance staff, says Larry Ponemon, chairman of Ponemon Institute LLC, a research company that specializes in privacy and data protection. "These folks may not fully understand or respect the complexities that IT-related ethical issues create," he notes.

TROUBLES, PAST AND FUTURE

Organizations that have policies in place often focus on areas where they had trouble in the past or emphasize whatever they are most worried about. When Reece was at the IRS, for example, the biggest emphasis was on protecting the confidentiality of taxpayer information, he says.

At the U.S. Department of Defense, policies usually emphasize procurement rules, notes Stephen Northcutt, president of the SANS Technology Institute and author of *IT Ethics Handbook: Right and Wrong for IT Professionals* (Syngress, 2004).

Adding to the complexity, an organization that depends on highly skilled workers might be more lenient. When Northcutt worked in IT security at the Naval Surface Warfare Center in Virginia, it was a rarefied atmosphere of highly sought-after Ph.D.s. "I was told pretty clearly that if I made a whole lot of Ph.D.s very unhappy so that they left, the organization wouldn't need me anymore," says Northcutt.

Of course, that wasn't written in any policy manual, so Northcutt had to read between the lines. "The way I interpreted it was: Child pornography, turn that in," he says. "But if the leading mathematician wants to download some pictures of naked girls, they didn't want to hear from me."

Northcutt says that he did find child porn on two occasions and that both events led to prosecution. As for other offensive photos that he encountered, Northcutt pointed out to his superiors that there might be a legal liability, citing a Supreme Court decision that found that similar pictures at a military installation indicated a pervasive atmosphere of sexual harassment. That did the trick. "Once they saw that law was involved, they were more willing to change culture and policy," Northcutt says.

When policies aren't clear, ethical decisions are left to the judgment of IT employees, which varies by person and the particular circumstances.

For example, Gary, a director of technology at a nonprofit organization in the Midwest, flat-out refused when the assistant CEO wanted to use a mailing list that a new employee had stolen from her former employer. But Gary, who asked that his last name not be used, didn't stop his boss from installing unlicensed software on PCs for a short time, though he refused to do it himself. "The question is, how much was it really going to hurt anybody? We were still going to have 99.5% compliant software. I was OK with that." He says he uninstalled it, with his boss's approval, as soon as he could — about a week later.

Northcutt argues that the IT profession should have two things that professions such as law or accounting have had for years: a code of ethics and standards of practice. That way, when company policy is nonexistent or unclear, IT professionals still have standards to fall back on.

That might be useful for Tim, a systems administrator who works at a Fortune 500 agricultural business. When Tim, who asked that his last name not be published, happened across an unencrypted spreadsheet of salary information on a manager's PC, he copied it. He didn't share the information with anyone or use it to his advantage. It was an impulsive act, he admits, that stemmed from frustration with his employer. "I didn't take it for nefarious reasons; I just took it to prove that I could," he says.

Tim's actions point to a disturbing trend: IT workers justifying their ethically questionable behavior. That path can end in criminal activity, says fraud investigator Chuck Martell. "We started seeing a few cases about seven or eight years ago," says Martell, managing director of investigative services at Veritas Global LLC, a security firm in Southfield, Mich. "Now we're [investigating] a tremendous amount of them."

Whichever side of the line they're on, IT workers will — for now at least — continue to muddle through ethical dilemmas on their own and wrestle with their consciences afterward. ■

Harbert *is a Washington-based freelance journalist specializing in technology, business and public policy.*

A Code of Ethics for IT

Some computing groups have developed, or are working to establish, ethics codes for IT.

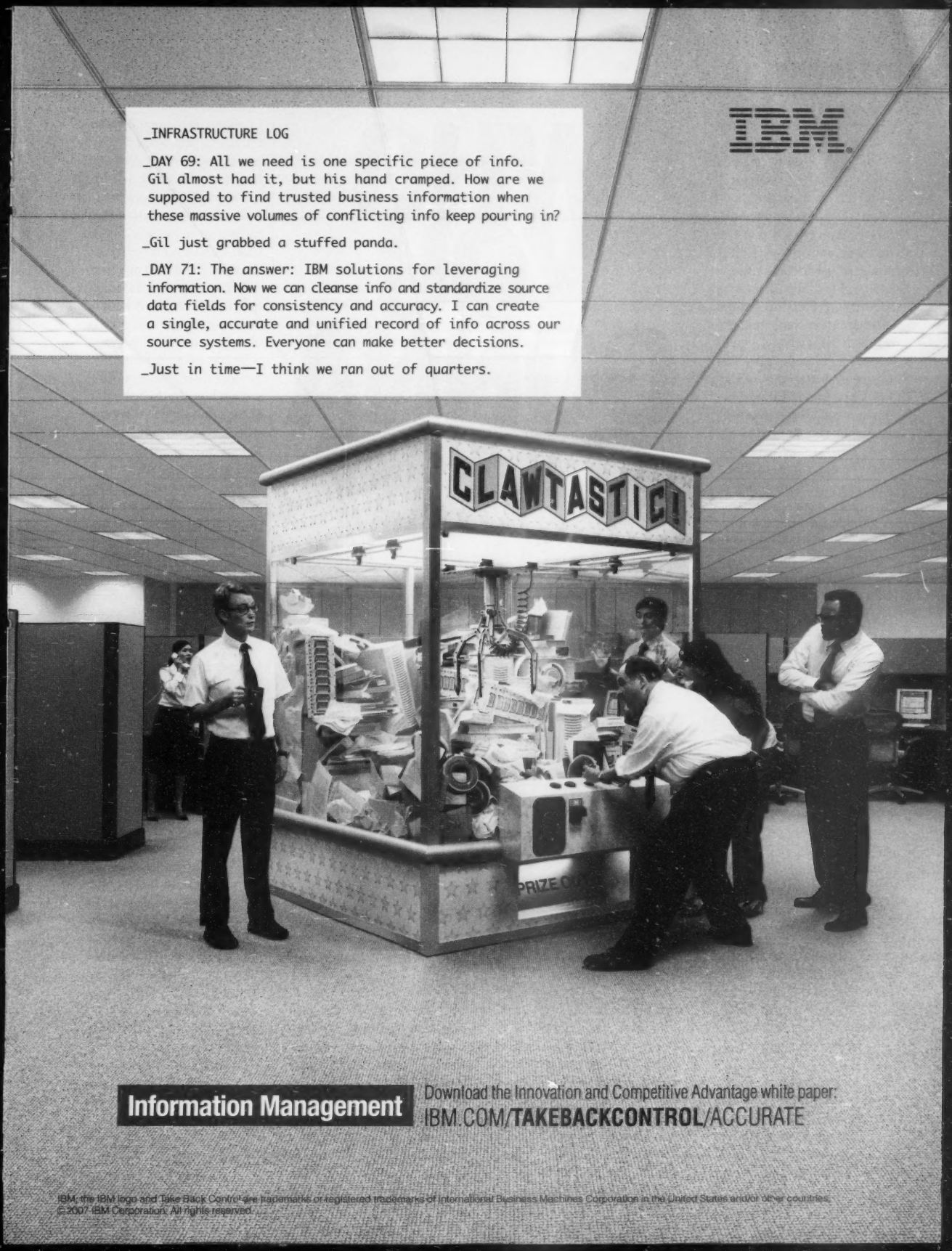
The Association for Computing Machinery and the Association of Information Technology Professionals, for example, have adopted generalized ethics codes. And the Institute of Electrical and Electronics Engineers Inc. has both a general code of ethics and a software engineering code of ethics.

The following certification groups are currently working together to draw up a code of ethics for IT security professionals:

- **Global Information Assurance Certification**
- **Information Systems Audit and Control Association**
- **International Information Systems Security Certifications Consortium Inc.**
- **Information Systems Security Association Inc.**
- **ASIS International**

If a universal code is adopted, the next step would be standards of practice that would serve as teeth behind the code – a sort of American Bar Association for IT. If an IT worker violated the standards, in theory he might be "disbarred" from the profession.

– TAM HARBERT


_INFRASTRUCTURE LOG
_DAY 69: All we need is one specific piece of info. Gil almost had it, but his hand cramped. How are we supposed to find trusted business information when these massive volumes of conflicting info keep pouring in?
_Gil just grabbed a stuffed panda.
_DAY 71: The answer: IBM solutions for leveraging information. Now we can cleanse info and standardize source data fields for consistency and accuracy. I can create a single, accurate and unified record of info across our source systems. Everyone can make better decisions.
_Just in time—I think we ran out of quarters.
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WHO YOU GONNA CALL?

After a data breach, navigating the tangle of state notification laws can be exasperating — and costly.

By Jennifer McAdams

BANANAS.COM was caught off guard last year. The musical instrument sales site suffered a data breach that was followed swiftly by a double whammy of consequences.

Roughly 250 customer records were exposed, likely after an individual stole an administrative password by accessing systems remotely. (Site owner Bananas at Large has since put additional security procedures in place to prevent a recurrence.)

After the breach, the 25-person company scrambled to comply with the many state laws requiring customer notification. It alerted only the affected customers, either by mail or e-mail. Because its own resources were limited, Bananas referred victims to large credit-reporting agencies to monitor for subsequent financial damage from the breach.

Despite its efforts, Bananas apparently failed to meet all the various state notification requirements and was subsequently slammed with fines and fees by major credit companies. "They did not specifically provide a reason for the fees other than saying that we had not met all of the terms in our agreements with them," says Bananas President J.D. Sharp. "They'll fine the pants off you," he adds.

The Bananas experience provides a hint of the turmoil a company can face as it tries to cope with disclosure requirements in the wake of a data breach. With more than 30 state data-disclosure notification laws now on the books, officials at many companies doing interstate business are hoping that cohesive national legislation will smooth out the nuances among differing statutes. But so far, federal legislation that would unify corporate disclosure rules is merely inching forward.

With no imminent legislative relief in sight, corporations sometimes resort to blanketing customers with notifications after a breach — lobbing disclosures even in those states that don't require them, simply to cover all bases. But this practice can have "unintended detrimental consequences," says Robert Scott, managing partner at the Dallas office of Scott & Scott LLP, a law and IT services firm.

Studies have shown that most customers would take their business elsewhere if they received two or more security breach notices, says Scott. "When faced with a security incident, businesses should carefully determine who has been impacted, review their breach notification laws in the relevant states, and devise a breach notification strategy that satisfies the legal obligations and properly notifies affected consumers," he says.

Many organizations are integrating the efforts of IT, Legal and other departments to come up with strategies to comply with state regulations and ultimately weather worst-case scenarios. Others are stepping up encryption efforts, since many states don't force companies to disclose security incidents if the compromised data was encrypted.

Companies as varied as Microsoft Corp., Bank of America Corp. and Verizon Communications Inc. have all taken steps to address the issue with specific teams and processes to handle disclosure in the event of a breach. In large companies, disclosure activity often involves multiple jurisdictions, such as the offices of the chief auditor, the chief compliance officer, the chief privacy officer and the chief technology officer or the CIO, says Joseph Rosembaum, a partner at New York law firm Reed Smith LLP.

The lack of a central authority can create problems. "Where responsibilities are partitioned across a diverse set of functions, each of-

Continued on page 40

IBM
_INFRASTRUCTURE LOG
_DAY 89: Our power and cooling costs are out of control. We spend the bulk of our IT budget just keeping the data center cool. I told Gil we need to go green in a big way.
_DAY 91: Gil took us green...kelly green, to be exact.
_DAY 93: You don't go green with paint. You go green with IBM Cool Blue™ technology and energy management services. Advanced server and storage virtualization can help consolidate our boxes to lower energy usage. And the new IBM POWER6™ systems help us use less energy doing the same amount of work.[1]
_Our data center will be green now. And painted white.

Learn how to make your data center more efficient:
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Continued from page 38

fice may have the ability to provide greater focus on individual issues, but the challenge of coordination across multiple disciplines is more difficult," Rosembaum notes.

Moreover, it takes corporate vigilance to keep pace with so many differences in state disclosure laws — variations that start with notification triggers. Some states require notification only if a breach is likely to harm individuals. Others force companies to cast a wider net.

"For some states, any breach that compromises the security or confidentiality of covered personal information triggers the obligation to notify the affected individuals," notes Thomas Smedinghoff, a partner at Chicago law firm Wildman, Harrold.

The timing on triggers also varies. "Some states require that consumers be notified when their information is lost. Other states will allow the breached entity to perform some analysis to determine the degree of risk to consumers," says Jorge Rey, information security and audit manager at independent accounting firm Kaufman Rossin Co. in Miami.

Notification triggers aren't the only differences among state laws. For example, although one state might allow exemptions for compromises of encrypted data, "another state without such an exception would require a notice, even though the data was unreadable," says Geoff Gray, a privacy and data security consultant at the Cyber Security Industry Alliance in Arlington, Va.

And as Bananas.com learned, the high cost of notification compliance doesn't stop with the resources it takes to coordinate a response and alert customers. "Enterprises may face potential litigation and fines," says Scott.

A Smorgasbord of State Requirements

18 states and Washington, D.C., require notification of any breach. ■ 20 states require notification only when risk of harm is present.

38 states provide for exemptions if compromised data was encrypted.

24 states require notification of government officers or agencies such as the state attorney general, the consumer protection board and the state officer of cybersecurity.

SOURCE: THOMAS SMEDINGHOFF, WILDMAN HARROLD

Alabama		Montana	■
Alaska		Nebraska	
Arizona	■	Nevada	
Arkansas	■	New Hampshire	
California		New Jersey	■
Colorado		New Mexico	
Connecticut	■	New York	
Delaware		North Carolina	■
Florida	■	North Dakota	
Georgia		Ohio	■
Hawaii		Oklahoma	
Idaho		Oregon	■
Illinois		Pennsylvania	■
Indiana		Rhode Island	■
Iowa		South Carolina	
Kansas	■	South Dakota	
Kentucky		Tennessee	
Louisiana	■	Texas	
Maine		Utah	■
Maryland	■	Vermont	■
Massachusetts		Virginia	
Michigan	■	Washington	■
Minnesota		West Virginia	
Mississippi		Wisconsin	■
Missouri		Wyoming	■

DAMAGE CONTROL

The team at ChoicePoint Inc. knows all too well the complexities of navigating state disclosure laws. After a data breach two years ago, the Alpharetta, Ga.-based company dashed out notices to about 163,000 people. "We expanded upon legislation that only existed at the time in California and opted to make nationwide notification of potentially affected consumers, without any state or federal law requiring us to do so," says Christopher Cwalina, ChoicePoint's assistant general counsel and vice president for compliance.

The company's woes made headlines, but the incident also prompted it to codify breach management plans and assemble a response team. Its policy now "lists all enacted state data breach notification laws, as well as the unique requirements of each law," Cwalina says.

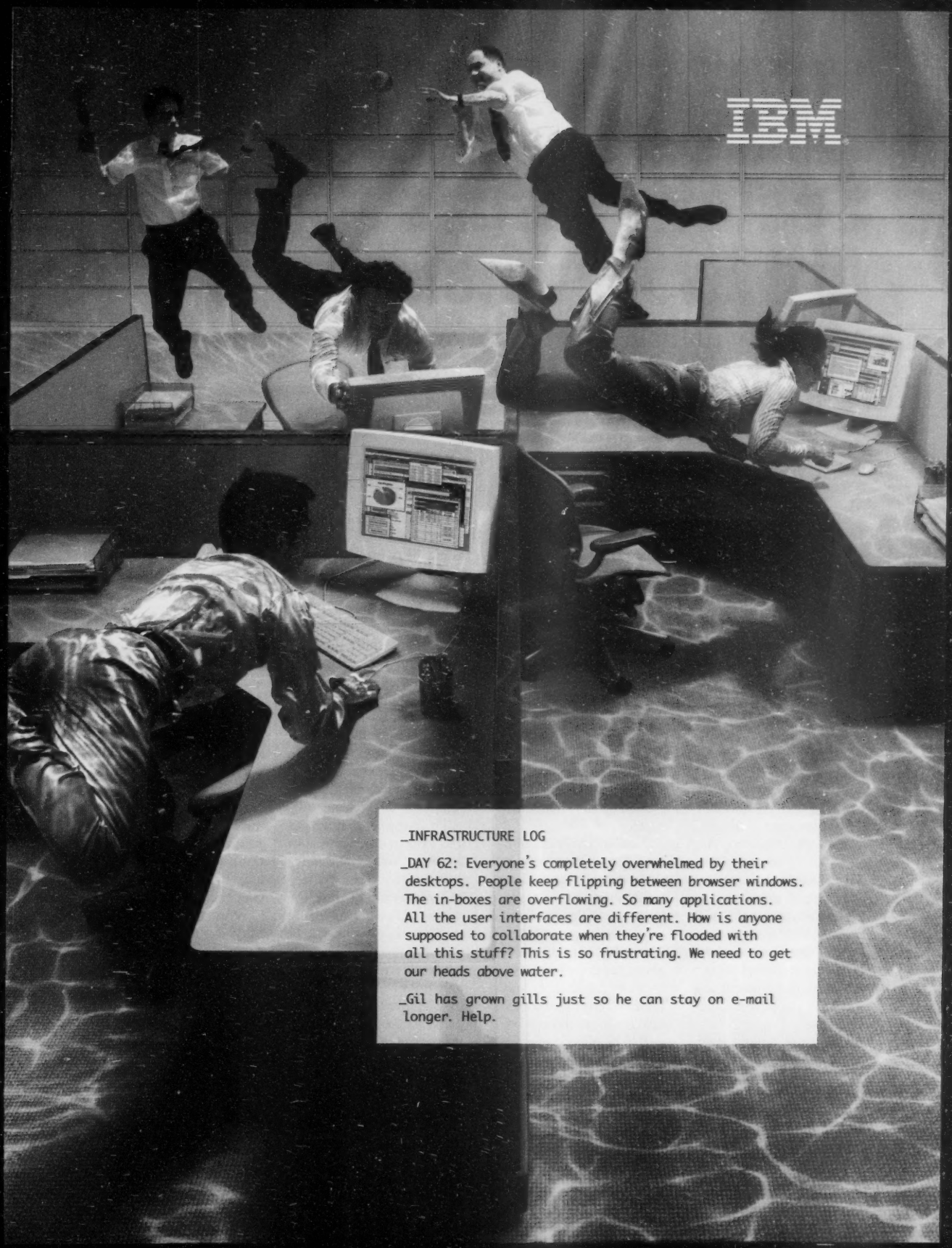
In addition, ChoicePoint leans heavily on its government affairs team and legal department to track the laws and monitor compliance in the event of a breach.

Large or small, companies should plan ahead to lessen the burden of notification in the event of a data breach. "Encryption is the single most effective way to avoid the negative business impact of data breaches," says Scott. "Under most privacy statutes, if you have encryption, you get a free pass from notification."

But with or without encryption, it's wise to devise a strategy for disclosure in the event of a breach. Companies should have a team in place that can assess the scope of damage and meet the demands of state regulators and credit card companies.

The goal, says Cwalina, is to "act quickly, investigate thoroughly and notify promptly." ■

McAdams *is a freelance writer in Vienna, Va. Contact her at JMTechWriter@aol.com.*



_INFRASTRUCTURE LOG

_DAY 62: Everyone's completely overwhelmed by their desktops. People keep flipping between browser windows. The in-boxes are overflowing. So many applications. All the user interfaces are different. How is anyone supposed to collaborate when they're flooded with all this stuff? This is so frustrating. We need to get our heads above water.

_Gil has grown gills just so he can stay on e-mail longer. Help.

Security Issues Are Everywhere

A security manager's **job is never done,** but it helps if everyone in the agency has **been trained** to recognize **trouble.**

SOMETHING that arose last week shows that security is a never-ending battle, but it also demonstrates the importance of making everyone security-conscious.

The latest security lapse in my state agency was brought to my attention by the IT program manager in charge of the contract with the vendor that handles the processing of the agency's Medicaid claims. (Most of us at the agency had been blissfully ignorant of it.) Currently, he is working with the accounting department to figure out how to reduce copying and mailing costs.

The vendor in question passes those costs on to us to the tune of about $1 million a year. I'm all for saving taxpayers money, but why does it always seem that even our cost-cutting initiatives raise our security risks?

This program manager — let's call him Pete — hadn't always been very aware of security issues, but he and I had been working together on ensuring that the appropriate language outlining our security requirements was included in all our vendor contracts and requests for proposals. His new awareness came to the fore when he toured the state's copy and distribution center and its mailroom to see whether we could pull the copying and mailing in-house to save some money.

What Pete found was that our agency regularly sends boxes of letters containing protected health information to the state copy center to be stuffed into envelopes and then mailed by the state mailroom.

Pete has spent enough time with me lately that this process triggered security alarm bells inside his head. We're answerable to the strictures of HIPAA. Pete asked his tour guide about the copy center's security procedures and learned that there weren't any, really. Although key-code access readers had been installed on all the doors, they had never been activated. Internal doors weren't locked, and employees moved about freely.

■ Pete has spent enough time with me that security alarm bells sounded in his head.

The boxes of letters are picked up by a state van and delivered to the copy room, where they are stacked with all the other agency requests and processed on a first-come, first-served basis. So they are transported insecurely and then left unattended in a room with lax security. I was starting to get a headache.

The copy room manager told Pete that he would be happy to comply with any security requirements we had and would be open to the idea of us giving his staff security training.

RAISING AWARENESS

When Pete told me all this, I pulled in the HIPAA privacy officer, who asked what type of information was printed on those letters. It couldn't have been worse: Social Security numbers, names, addresses, Medicaid information. I thought we both were going to faint dead away.

Trouble Ticket

AT ISSUE: Letters containing HIPAA-protected health information are being handled laxly.

ACTION PLAN: Raise awareness of security issues beyond the confines of this one agency.

The privacy officer then had a talk with the program manager whose department was sending these documents to the copy room. She learned that the letters containing the sensitive information were being sent out to people so they could confirm that all of their information was correct. We are now looking at whether this procedure needs to be changed.

Because the copy center and the mailroom are in two separate state agencies, we need to talk to the administrators of each agency about the need to handle our sensitive information securely. We will probably want both to sign HIPAA business-associate agreements, which would outline the agencies' responsibilities in protecting information. And we are certainly going to have to do some training.

Who knows? Maybe a little security consciousness-raising for the copy center and mailroom staffs will lead to another security lapse being uncovered before it's too late. ■

This week's journal is written by a real security manager, ***"C.J. Kelly,"*** *whose name and employer have been disguised for obvious reasons. Contact her at mscjkelly@yahoo.com.*

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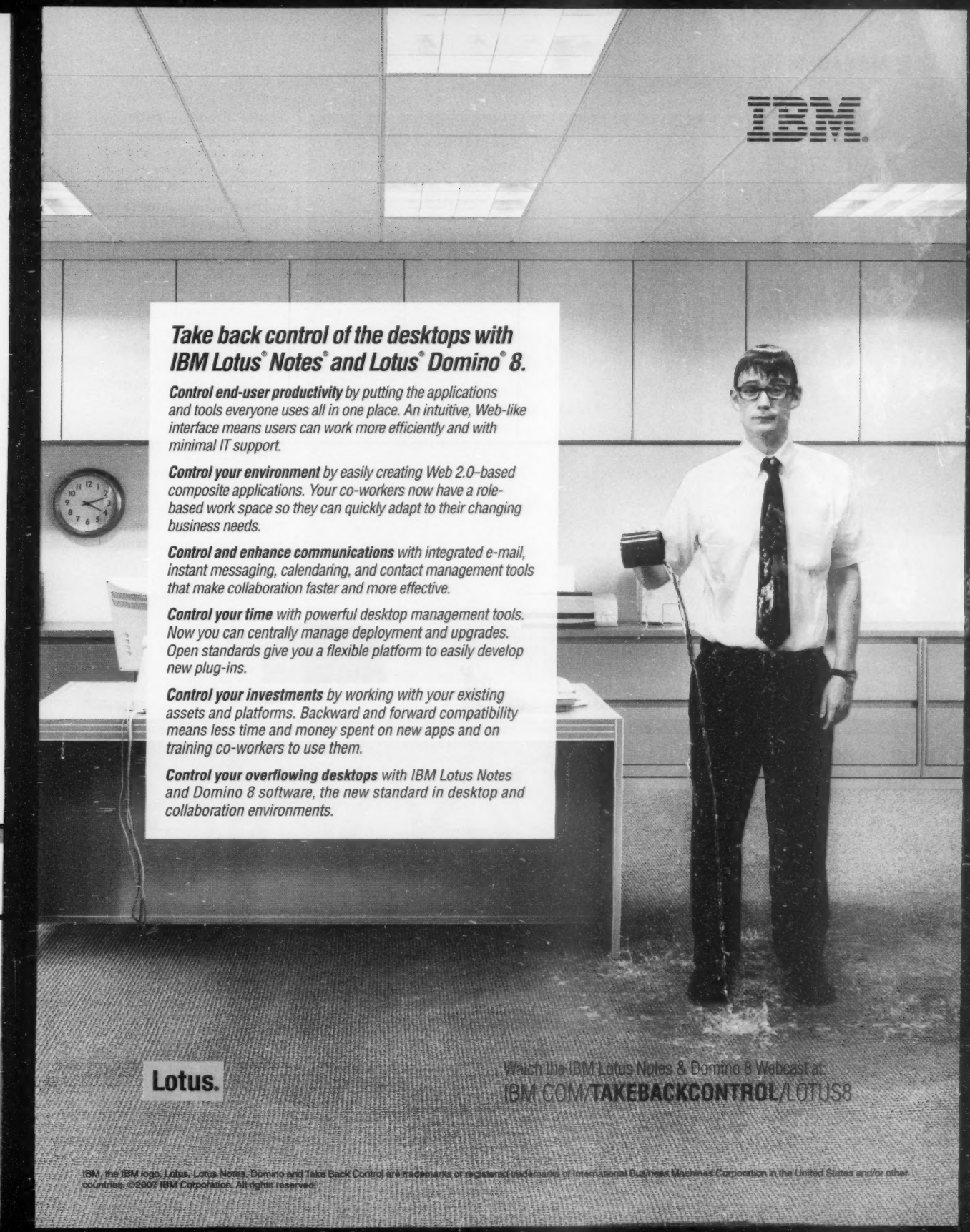
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The People Side of IT Architecture

Successful enterprise architecture is really built on relationships.

By David Raths

SOMETIMES the best way to define an original IT initiative is to invent a new word. *Stratactical* is the word the enterprise architects at San Mateo, Calif.-based Con-way Inc. created to describe their work.

"We use it all the time," says Maja Tibbling, lead enterprise architect at the freight transportation and logistics company. "Our team takes into account both the strategic and the tactical."

The enterprise architecture (EA) team at the Portland, Ore., offices of Con-way Enterprise Services has been together for two and a half years. When the company consolidated the IT operations of its freight and logistics divisions, CIO Jackie Barretta created a centralized EA group, believing that a team of 15 architects could develop a road map for Con-way's 700 IT employees.

CIO Jackie Barretta made the case for creating a centralized enterprise architecture group at Con-way Inc.

The architecture had grown up informally and gradually in the freight division, and it was a challenge to justify a formal EA team to the company's leadership, Barretta recalls. "I had to explain what it leveraged," she says.

She argued that a strong EA team would be a catalyst for business growth, with its service-oriented architecture (SOA) approach reshaping how information flowed through freight service center operations.

Yet like other EA groups, the team at Con-way has struggled at times to gain

Continued on page 46

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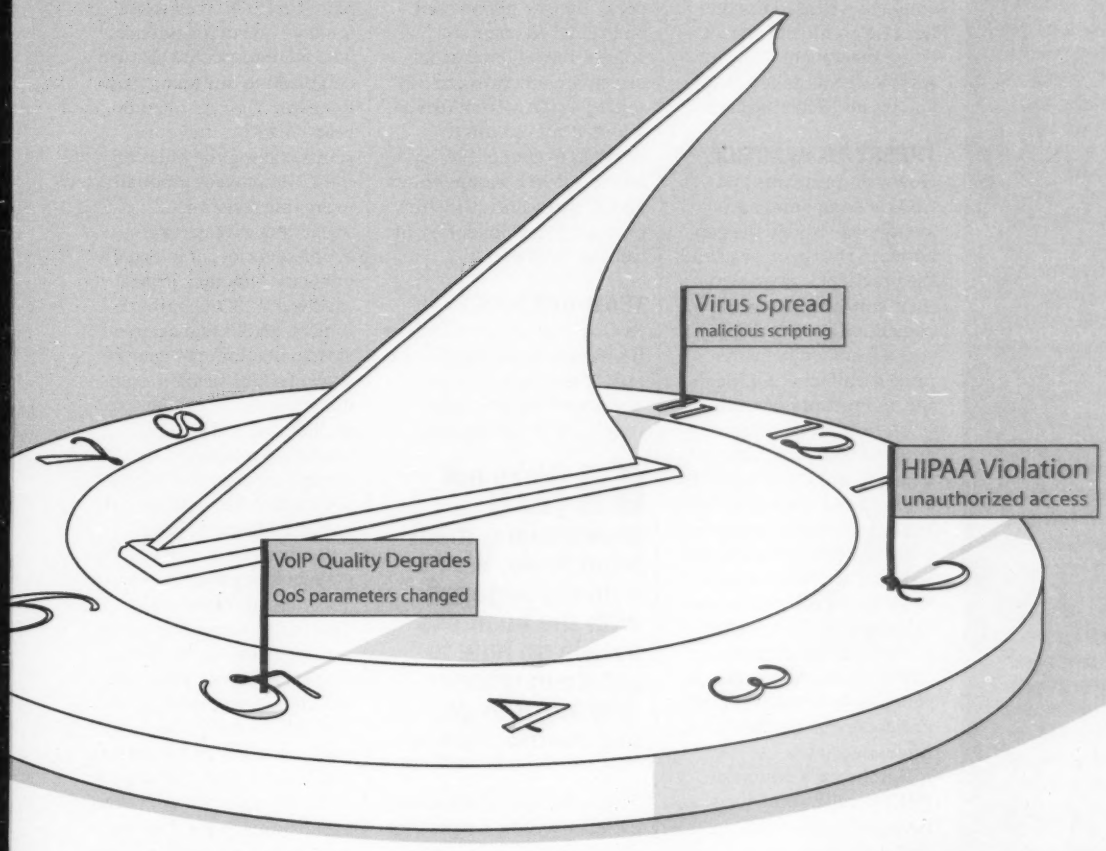

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Business-Driven Architecture

Consultant Brenda Michelson coined the term "business-driven architecture" to describe a practice in which an EA team regularly introduces the architecture into IT business projects. She has a few tips for CIOs trying to fine-tune EA team performance:

Create shared goals for EA teams and IT project staff. Typically, IT projects are measured in on-time and on-budget terms, while an architect's longer-term SOA project might be measured by reuse and optimization of infrastructure. "If the EA people stress the need to reuse shared infrastructure, that has to be part of the project team's stated goals," Michelson says. "And the EA team has to be graded on the success of shorter-term projects as well."

Seed architects on project teams. "To be successful, you need relationships; you need trust," Michelson says. "When project leaders see you are actually pragmatic and willing to help with deliverables, that builds trust."

Have the chief architect report directly to the CIO. "If a chief architect reports to someone in planning or the project management office, they can get too project-focused and lose the larger architectural picture," Michelson says. But if the chief architect is at the table in the CIO's meetings with business unit leaders, he will hear things differently than if they were filtered down through other managers.

—DAVID RATHS

Continued from page 44

the acceptance of business units and application developers. "I felt like we weren't making progress for a while," Tibbling says.

Con-way's logistics group had experienced false starts with EA in the past. Some employees sensed that enterprise architects had an ivory-tower mentality. "It was viewed as added cost and waste," Tibbling says.

THEORY TO PRACTICE

How well EA teams and CIOs at companies such as Con-way bridge the gap between the theoretical and the practical is crucial to their survival, according to consultant Brenda Michelson, a former chief enterprise architect at L.L.Bean Inc. in Freeport, Maine.

EA teams were first created to rationalize what was going on in IT, she explains. Their initial work may have been as basic as coming up with approved product lists. But now architects take a more active role, often leading major initiatives such as SOA implementations. "They are more involved in substantive things — helping project teams do their jobs," Michelson says.

But there's a downside. "Historically, some have been guilty of seeing the architecture as an end, as something they create and then hand off," she adds.

For instance, EA is mandated within the federal government, so EA plans are being produced — but they aren't always used, Michelson says. Also, because some people on EA teams haven't been in a delivery role for some time, they can lose touch with the needs of teams that are delivery-focused, she says.

Michelson, now principal of Elemental Links, an IT advisory firm in Gray, Maine, bases her consulting work on her experience at L.L.Bean, where she founded the EA group. She remembers early on hearing comments like "Oh, you're the one who writes all those white papers." But she persevered and achieved concrete results, introducing event-driven architecture and SOA initiatives. (An event-driven architecture is built to respond to change. For example, when a shopper buys an L.L.Bean shirt, the shirt changes from "inventory for sale" to "sold goods.")

TEAM-BUILDING

At Con-way, Barretta and her EA leaders faced the delicate task of forging an EA team from two business units, freight and logistics. Only

> **"We're not just IT geeks telling them what to do. We're actually engaged with the business people on how to get them where they want to go."**
>
> **MAJA TIBBLING,** LEAD ENTERPRISE ARCHITECT, CON-WAY INC.

freight had any architectural experience. The EA practice there had grown up organically. They had started working on projects in an ad hoc way, and as they gained trust, people began to ask them what principles should guide their work, Tibbling says.

Most of the members of the initial EA team came from freight because EA was a foreign concept to many in the logistics unit. They'd had limited experience with architects, and they considered it bad experience. They felt that EA established boundaries and added cost to their projects without bringing enough tangible benefits.

The challenge, therefore, was to foster acceptance of EA concepts and to build trust among co-workers, says EA team manager Jeon Rezvani. "We looked for key players in logistics who were respected that we could add to our team," says Rezvani. "Communication, evangelization and constantly taking the pulse of the IT employees gradually overcame resistance."

Barretta gave certain EA projects lots of internal publicity. One such project involved an SOA approach to the logistics management system that brought a new level of sophistication, automation and process control to planning and optimizing truckload volumes. "We made very clear the role the EA team had in putting that in place," Barretta says.

Representatives from each stakeholder group are involved in architectural decision-making. For example, members of the virtual team tasked with choosing which business intelligence tool will be used company-wide are led by an EA person, but "they pull people from different application development teams to get their input on pros and cons of each application," Barretta says.

"We let them influence road maps, and we made tactical compromises," Tibbling says. "We understand that they are driven by deadlines, and we are not going to insist on changes that would unreasonably upset those deadlines. Instead, we try to make small, incremental improvements within their budgets."

As important as winning over the IT staff is, Tibbling

Continued on page 48

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Continued from page 46

stresses that it's also important to get involved in strategic planning with business units. For instance, the logistics unit has asked her to sit on a long-term planning task force studying trends in transportation. "This is great visibility," she says. "It shows people that we're not just IT geeks telling them what to do. We're actually engaged with the business people on how to get them where they want to go."

TRANSFORMATION

Michael Kim has experienced the development of an EA team at The Hartford Financial Services Group Inc. from both sides. As a divisional CIO at the Hartford, Conn.-based insurance giant, he was one of the team's initial customers. But after a recent promotion to chief technology officer of The Hartford's property-casualty unit, he is now responsible for the EA team's performance.

The evolution of EA at The Hartford is part of a broader transformation three years in the making, Kim says. After taking stock of the company's technology staff and processes, IT leaders realized they lacked discipline and a framework.

"We had good people doing architecture work, but they were embedded within divisions," Kim says. "We have five divisional CIOs, each with his or her own enterprise architect."

Last year, those people were consolidated into a team. But gaining acceptance of that centralization was a challenge. "Probably the biggest limiter for companies that haven't centralized this function yet is the loss of control divisional CIOs expect," Kim says. "If the architects are perceived as having moved into this centralized group but not offering more value, the CIOs would not be happy about it."

But in his experience as a divisional CIO, Kim felt he was starting to get more value from the EA team. "I had access to more resources, people with very specific architectural training. I started seeing a real lift in the quality of talent available," he recalls. "When CIOs see that, it makes it easier for EA to push forward its agenda."

Because architects were previously embedded in departments, integrating them into project teams hasn't been a problem, Kim says. Once any project is launched, the first step is determining the parameters — dollar amounts and the time frame — and architects lead that effort.

> **"If the architects are perceived as having moved into this centralized group but not offering more value, the CIOs would not be happy about it.**
>
> **MICHAEL KIM,** CTO, PROPERTY-CASUALTY, THE HARTFORD

The Hartford recently created an architectural steering committee to assign red, yellow or green ratings to IT projects based on their adherence to architectural frameworks. "Projects that get red ratings now are coming under more intensive scrutiny and get more executive pushback," Kim says.

Kim regularly reminds the architects that they're responsible to their business customers. "Our job is to deploy our resources so that we get the most out of them," he says.

One of Kim's top goals is to increase the momentum the EA team has achieved. His challenge is to decide which aspects of the architecture to emphasize first.

Many IT leaders say their greatest challenge is finding architects who will act less like technologists and more like anthropologists seeking to understand the culture of their organizations.

"To have influence with people, you have to understand where they're coming from — what motivates them," Michelson says. Sometimes people assume they have positional authority to dictate changes, but that approach usually fails, she says, adding, "It's more about building relationships." ■

Raths *is a freelance writer based in Philadelphia. Contact him at draths@mac.com.*

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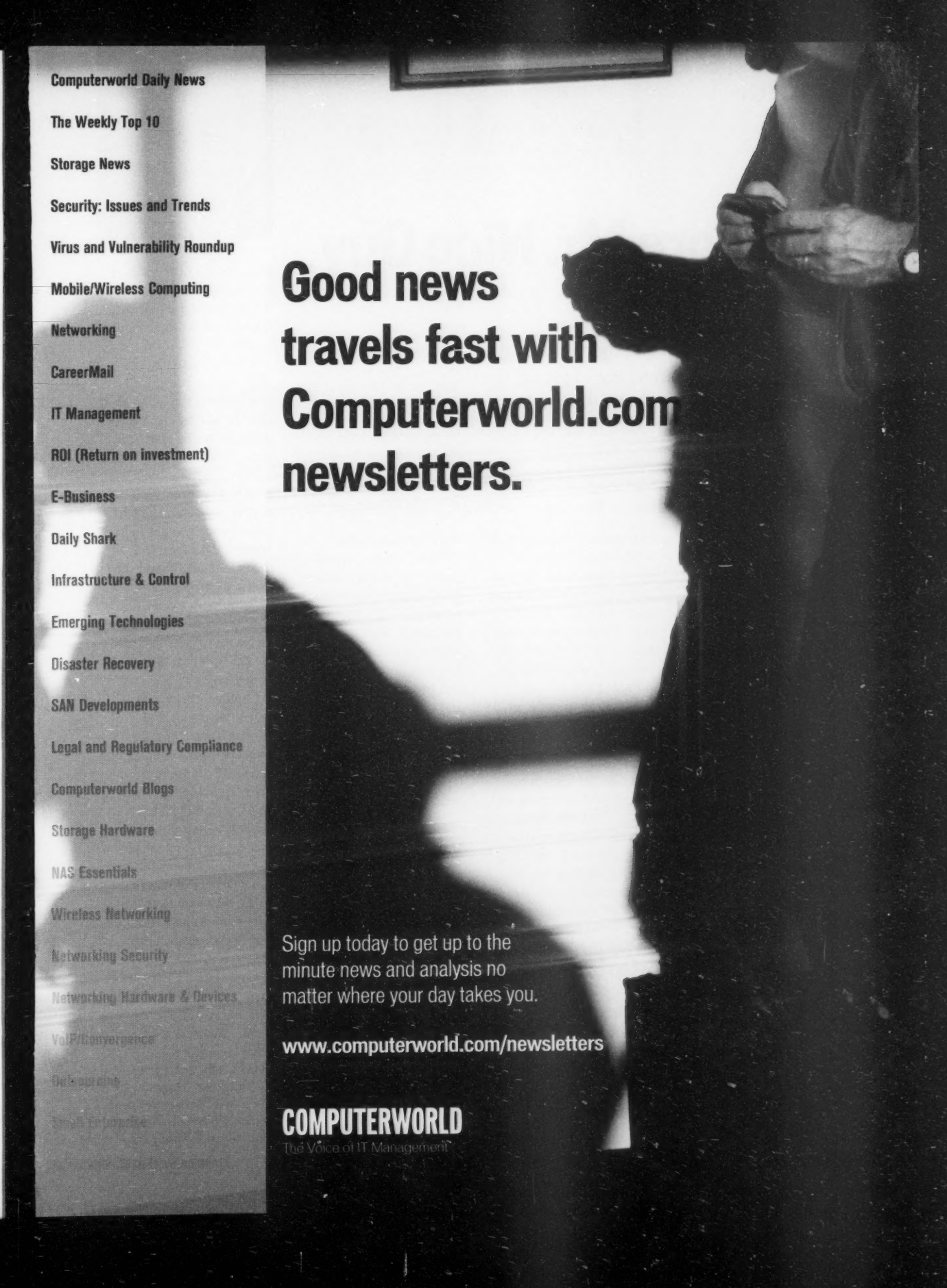
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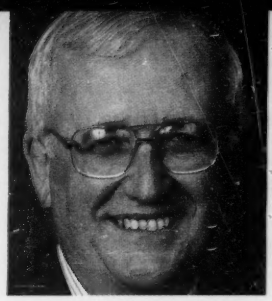
■ OPINION

Paul M. Ingevaldson

No More Mr. Nice Guy



IT HAS BEEN my experience that IT professionals will do just about anything to please the user. Regardless of what is requested, the typical IT pro says yes. But what has it gotten us? We are being outsourced, offshored and told that we don't matter. We agree to a major enhancement to a system during development, and we get charged with missing budgets and deadlines. We agree to modify an outside package, and then we are criticized when we incur ongoing maintenance costs.

It's time to become more professional and take our place in the company hierarchy. It's time to stand up for our principles. It's time to say no.

When users don't have time to tell us what they really want in their new system, we should say, "No. You can't have the system until you spend the time to tell us what you want."

When users come to us during the development cycle and significantly change the specs and expect us to meet all the former deadlines, we should say, "No. If you want these changes, we are happy to put them in, but we are also going to have to re-estimate the project and develop new timetables and costs."

When users ask us to customize a commercial software package, we should say, "No. The reason we bought an outside package was to avoid the downstream maintenance and compatibility costs. If you go with an outside package, you must agree to conform to its processes."

When a user department asks us to determine the return on investment and then sell the project, we should say, "No. We would be happy to work with you on the process, but it's up to you to calculate the ROI and sell it to the steering committee."

■ Regardless of what is requested, the typical IT pro says yes. But what has it gotten us? We are being outsourced, offshored and told that we don't matter.

When a user department complains that it didn't receive the expected benefits of a project, we should say, "Back off. We are responsible for developing the system on spec, on time and on budget. You are responsible for making the changes necessary to ensure proper implementation and the resulting benefits."

In order to better control our fate and reputation within our companies, we in IT must begin to act the same way other support departments do.

No construction company would erect a building without an agreement on specs. It would say no.

No construction company would ever make a field change of significance without having a signed-off change order in the files. It would say no.

No construction company would be expected to justify a factory that it happens to be building. If asked to do so, it would say no.

It would also say no if its contract required it to be responsible to attain the savings that were included in the justification.

Now, I don't expect IT pros to say no by "just saying no." There are ways to say no that help everyone understand the roles that IT and the users must play in every development cycle. The ability to say no tactfully and with respect is a major skill set that we need to develop.

I believe we would all be surprised at the results if we stood up for these principles in a professional manner.

Every profession has rules of conduct that are not violated. Many professions, such as accounting, have organizations that establish the rules, and woe to the person who violates them. But experience shows that as soon as users feel that the rules can be adjusted, they will ask us to do it.

My advice: Just say no! ■

Paul M. Ingevaldson *retired as CIO at Ace Hardware Corp. in 2004 after 40 years in the IT business. Contact him at ingepi@aol.com.*

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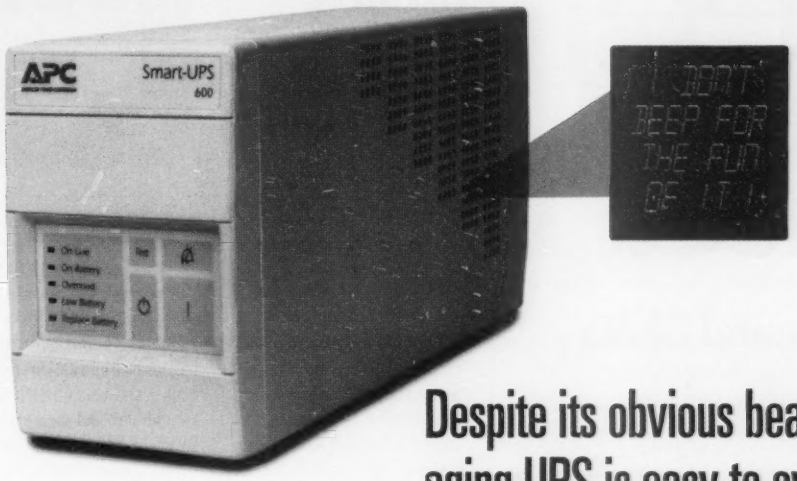

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Career Watch

The In-Demand Skills

The eight technical skills most often cited by CIOs as being most needed within their IT departments.

	Skill	Percentage Citing It
1	Windows administration	73%
2	Network administration	70%
3	Database management	60%
4	Firewall administration	55%
5	Wireless network management	52%
6	Business intelligence	34%
7	ERP implementation	22%
8	Microsoft .Net development	22%

SOURCE: ROBERT HALF TECHNOLOGY'S 2008 SALARY GUIDE, FROM AN AUGUST 2007 SURVEY OF 1,400 CIOs; MULTIPLE RESPONSES ALLOWED.

2%

Unemployment rate for IT jobs, based on an average of quarterly Bureau of Labor Statistics household survey data for the 12-month period that ended in June.

754,000

Number of U.S. workers 55 years or older who were unemployed and actively seeking work last year.

SOURCE: U.S. BUREAU OF LABOR STATISTICS

Job Hunting: Get Started

IT workers looking for new jobs can download what IT staffing services company TAC Worldwide Cos. calls the Start button. The button, which can reside on any Windows PC's desktop, provides one-click access to TACSource, the company's proprietary database of more than 10,000 IT and engineering positions. If you use it and like it, you can e-mail the TAC Start button to job-seeking friends.

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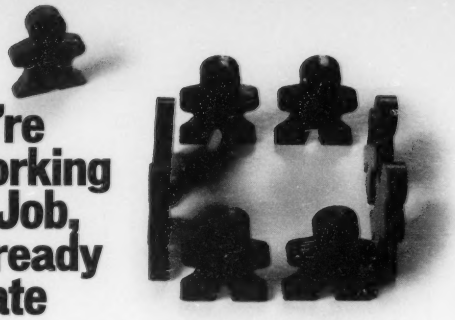

If You're Networking For a Job, It's Already Too Late

BY THOMAS HOFFMAN

As Hunter Muller sees it, professional networking is analogous to the TV game show *Who Wants to Be a Millionaire*.

"It's the power of the network, the power of the lifeline that helps people out," said Muller, president and CEO of The Advisory Council, a Norwalk, Conn.-based IT research and advisory service.

But for many people, there's a delicate line between networking and job hunting. Professionals who mingle with their peers to find new positions often end up alienating the very people they're counting on for support, according to IT executives who spoke recently at a meeting of the Fairfield County, Conn., and Westchester County, N.Y., chapter of the Society for Information Management.

"People who are networking to find a job create distance [from their peers] because they're about taking and wanting, and networking is about giving and sharing," said Jeff Skulsky, CIO at Regeneron Pharmaceuticals Inc. in Tarrytown, N.Y. "If you're networking to find a job, it's too late," he added.

Sometimes, soft-pedaling can be more effective. When Rhona Kannon transitioned from a career as an IT professional into the IT recruiting market, she reached out to 150 people she knew, but she wasn't pushy. "I said, 'Hi, how are you? This is what I'm doing now,' without asking them for business," said Kannon, a partner at The Cambridge Group Ltd., a recruiter in Westport, Conn. Those contacts responded well to her easy-going approach, explained Kannon, and she credits them with helping to build her recruiting business.

Networking "is about approaching people on their terms" without necessarily expecting something in return, said Ed Pospesil, chairman of the Technology Executives Networking Group, a Guilford, Conn.-based network of 3,600-plus IT executives.

It's also an essential tool for would-be IT executives, he said. "The people who network are those who make it to the executive ranks," Pospesil said. "The worker bees don't."

SCHMOOZE OR LOSE

Even if you're appalled by the idea of "aimless, sycophantic schmoozing," **you may have to swallow your pride from time to time for the sake of career advancement**, says Lindsey Gerdes, in her June 21 "Starting Out" column in *BusinessWeek*. The challenge, she says, is to feel natural when networking and come across as authentic. That's no easy accomplishment, and the reason some would agree with the real estate investment analyst quoted by Gerdes who gave schmoozing that "sycophantic" label. In the article, Marty Nemko, a San Francisco Bay Area career coach and author of *Cool Careers for Dummies*, advises young professionals to **focus on "deep connections,"** not on handing out business cards to everyone in the room. Another bit of advice from Nemko: **Don't be reluctant to show weakness.** As Penelope Trunk, author of *The Brazen Careerist*, says in Gerdes' column, "If you don't let them know what you're nervous about, what are they doing for you?"

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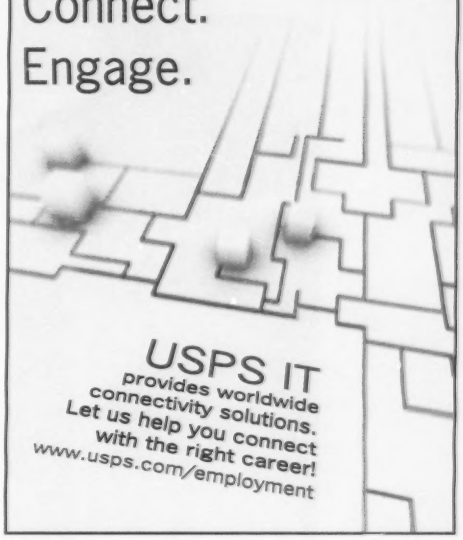

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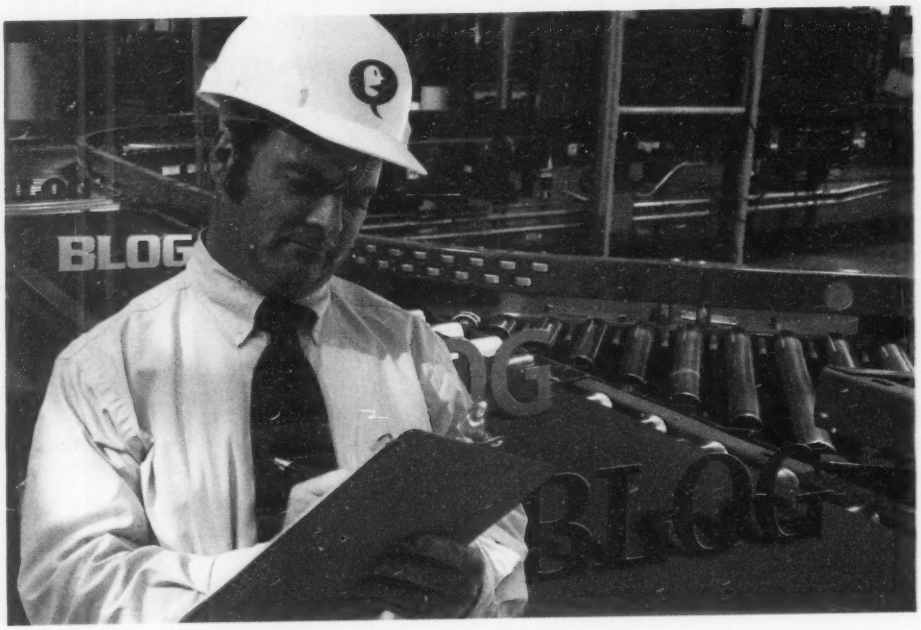

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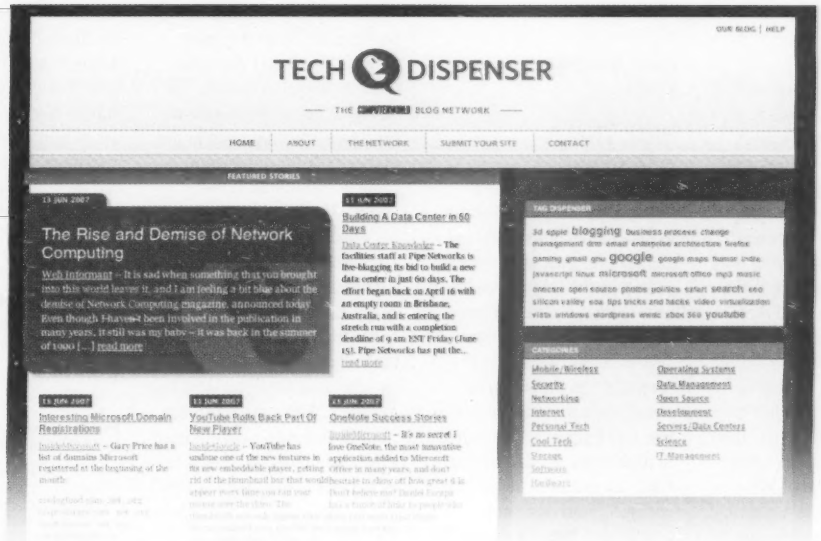
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Who Needs It?

User buys his own laptop and brings it to this IT pilot fish to load VPN software on it. But the machine comes with Windows Vista Home, and the VPN client software refuses to install – instead, it gives an error message saying that it needs an upgrade to Vista Professional first. "I voice-mailed the user and explained that our VPN software wasn't compatible with Windows Vista Home so I couldn't install it," fish says. "The voice mail I received back: 'I don't even know what that Windows Vista thing is anyway, so you have my permission to remove it from my laptop so I can get the VPN software.' Yeah, OK, I'll do that, but you're going to have bigger issues. . . ."

Well, That *Is* A Question

This company migrates to Active Directory and decides to use it as a centralized repository for user information – such as the site where the user works, address, phone numbers, manager's name. "Periodically, we send out reminders to the users to check their personal information and update it if necessary to make sure it remains current," says a pilot fish on the scene. "I sent one such e-mail with the standard closing telling users to contact me if they have any difficulties or questions. I received a reply from one of my users who simply asked, 'Who's my manager?' "

Cause and Effect

It's the 1990s, and Fred the PC networking manager is up on the sixth floor, dropping off a package that was mistakenly delivered to him. "As he left to get on the elevator, Fred saw and said hello to one of the sixth-floor denizens," reports a pilot fish in the know. "He then returned to his office on the third floor. The next day, fish's group was assigned a help desk ticket reading: 'Fred was on the sixth floor yesterday, and ever since then, the mainframe terminals have not been working properly.' This was a serious help desk ticket – even though Fred had no responsibility for or access to the mainframes."

Chicken Soup for The Clueless Soul

Pilot fish is covering the help desk at this small college when a call comes in from a former student – one who graduated a decade earlier. "Does Bob Smith still work there?" the caller asks. Yes he does, fish confirms. "Could you track Bob down and get his chicken and wild rice soup recipe?" asks caller. Sighs fish, "I reminded the caller that he was speaking with the information technology help desk. He told me that if I couldn't get the recipe, then I had no information that would help him."

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Ace Hardware Corp. 50
Alfresco Software Inc. 20
American Bar Association 36
American Greetings Corp. 14
ASIS International Inc. 36
Association for Computing Machinery 36
Association of Information Technology Professionals 36
AT&T Inc. 24
Atos Origin Middle East 16
Atos Origin SA 16
Bananas at Large 38
Bank of America Corp. 38
BEA Systems Inc. 14
Bureau of Labor Statistics 54
CA Inc. 12
Capstone Services Inc. 35
ChoicePoint Inc. 40
Cisco Systems Inc. 14, 16
Colorado Rockies Baseball Club Ltd. 16
Commander Communications Ltd. 16
Con-way Inc. 44
Cyber Security Industry Alliance 40
Cyber-Ark Software Ltd. 35
Elemental Links 46
Enterprise Strategy Group Inc. 12
ESi Acquisition Inc. 24
ETrade Financial Corp. 16
Facebook Inc. 16
Federal Bureau of Investigation 14, 35
Federal Trade Commission 60
Financial Executives International 26
First Security Bank 14
Foote Partners LLC 54
Fortify Software Inc. 26
Frito-Lay Inc. 14
General Dynamics Corp. 60
Google Inc. 16
Harvard Business School 32
Hewlett-Packard Co. 16
Honigman Miller Schwartz and Cohn LLP 35
HSBC Holdings PLC 14
IBM 20, 28, 30, 60
Infogix Inc 26
Information Systems Security Association Inc. 36
Intel Corp. 14
Internal Revenue Service 35
International Information Systems Security Certifications Consortium Inc. 36
Iron Mountain Inc. 12, 24
JGD Management Corp. 14
John C. Reece and Associates LLC 35
Kaufman Rossin Co. 40
L.L.Bean Inc. 46
Linspire Inc. 20
Louisiana Office of Student Financial Assistance 12
MasterCard International Inc. 60
Microsoft Corp. 16, 18, 20, 26, 30, 38
MySQL AB 15, 20
Narus Inc. 26
National Aeronautics and Space Administration 30
Naval Surface Warfare Center 36
Navini Networks Inc. 14
New Hampshire Bankers Association 60
Novell Inc. 20
Open Source Initiative 18, 20
Open Source Risk Management Inc. 20
Optaros Inc. 20
Oracle Corp. 14
Paciolan Inc. 16
Palm Inc. 30
Pepperdine University 24
Pepsi-Co Inc. 14
Ponemon Institute LLC 35, 36
Pund-IT Inc. 18
Rational Software Corp. 28
Red Hat Inc. 20
Reed Smith LLP 38
Regeneron Pharmaceuticals Inc. 54
Robert Half Technology 54
SANS Technology Institute 36
Scott & Scott LLP 38
Society for Information Management 54
StudioNow Inc. 20
Supervalu Inc. 14
SurfControl PLC 35
TAC Worldwide Cos. 54
TD Ameritrade Holding Corp. 16
TD Ameritrade Inc. 12
Technology Executives Networking Group 54
The Advisory Council 54
The Boston Red Sox 16
The Cambridge Group Ltd. 54
The Eclipse Foundation 30
The Hartford Financial Services Group Inc. 48
The Institute of Electrical and Electronics Engineers Inc. 36
The SCO Group Inc. 14
The TJX Companies Inc 12, 60
Time Warner Inc. 35
Transmeta Corp. 14
Turbolinux Inc. 18, 20
U.S. Air Force Academy 30
U.S. Department of Defense 14, 36
U.S. Department of Veterans Affairs 14
U.S. Government Accountability Office 14
U.S. Securities and Exchange Commission 12, 60
Veritas Global LLC 36
Verizon Communications Inc. 38
Victoria Department of Education and Early Childhood Development 16
Visa International Inc. 60
Wildman, Harrold Allen & Dixon LLP 40
Xandros Inc. 20

American Power Conversion 53
AT&T Wireless 17
CA 9
Canon C2-1
CDW Corporation 19
Dell C4
dtSearch 52
Hewlett-Packard Blade 13
Hewlett-Packard ProLiant 51
IBM IT Campaign 4-5, 37, 39, 41, 43
InterSystems C3
IT Executive Summit 47
Juniper Networks 11
Liebert 25
LXE 52
Microsoft Forefront 22-23
Microsoft Unified Communication 15
Network Instruments 45
Novell 31
Samsung 7
SAS 2
Sharp 27
Storage Networking World Best Practices Awards 33
Sun Microsystems 29
Webroot 21

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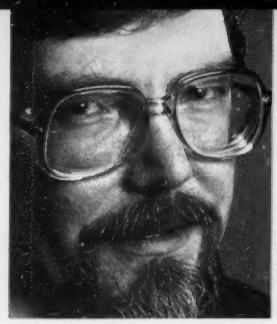
■ FRANKLY SPEAKING

Frank Hayes

No More Optimism



HOW LONG have we been hearing about this TJX mess? It's hard to believe, but the news broke last January: Intruders had stolen credit card transaction data about customers of T.J. Maxx, Marshalls and other TJX stores. Back then, TJX claimed that "a limited number" of customers were affected. "And by 'limited' we mean substantially less than millions," a spokeswoman said.

Last week, we got a harder number: 94 million customers.

How could TJX have been so spectacularly wrong?

One word: optimism.

Oh sure, these people might just be lying SOBs who deliberately covered up the awful news. But what we know suggests they really were concerned — just clueless as to how bad it could get.

Consider this: Back in January, TJX thought the breach came in mid-May 2006. But within weeks, an investigation by IBM and General Dynamics found that the first intrusion had happened almost a year earlier, in July 2005 — not seven but 17 months before it was discovered.

In January, TJX said the number of customers affected was under a million. But the New Hampshire Bankers Association, which represents banks that issue credit cards in that state, estimated that up to 4 million people were affected just in New England.

By March, TJX's estimate had ballooned to 45.6 million credit accounts in filings with the U.S. Securities and Exchange Commission. The company is still officially sticking with that number. But in court filings last week, a group of banks said that 94 million separate credit and debit card accounts were affected — 65 million Visa accounts and 29 million MasterCard accounts.

That's 100 times TJX's first estimate, and so astonishingly out of whack with the original statement that if it was an intentional lie, it was doomed to be unbelievable from the start.

But optimism? Yeah, we can believe that.

After all, IT people know how seductively dangerous optimism can be. It's the reason we routinely overrun project budgets and timelines. It's why user training always takes longer and is less effective than we expect it to be. It's the root cause of most of our software problems and hardware headaches.

■ A can-do attitude? Sure. A nothing-can-go-wrong view? Never.

We underestimate what can go wrong. And when it does, we're not prepared. In fact, we're blindsided.

And when it comes to security, optimism is deadly. It means we underestimate the risks before a breach and underestimate the damage once it happens.

Unfortunately, optimism is popular with management, especially at the top. Short schedules, lowball budgets and rosy security outlooks are what they want to hear. Realistic assessments of time, cost and risk? That's the stuff that gets the messenger shot.

But that's what we have to deliver.

How? With a little sugarcoating, maybe. Or backed by lots of statistical detail. Or with downside examples based on experience — our own or our competitors'.

Exactly how to rein in that desire for optimism depends on company culture and politics. But it has to be done.

And the first step is getting rid of unrealistic optimism throughout the IT shop. We have to recognize that problems, time bombs and dead ends exist, so we can find them and deal with them.

That doesn't mean gloom and doom should rule IT — just a healthy skepticism about how smoothly things will go, along with a sharp eye for worst-case scenarios.

A can-do attitude? Sure. A nothing-can-go-wrong view? Never.

As for TJX, for all the trouble optimism has caused through the course of this security fiasco, maybe this isn't the time to abandon those rose-colored glasses.

With the FTC, Canadian privacy regulators, state officials and 94 million customers breathing down its neck, TJX had better hope things just don't get any worse. ■

Frank Hayes *is* Computerworld's *senior news columnist. Contact him at frank_hayes@computerworld.com.*

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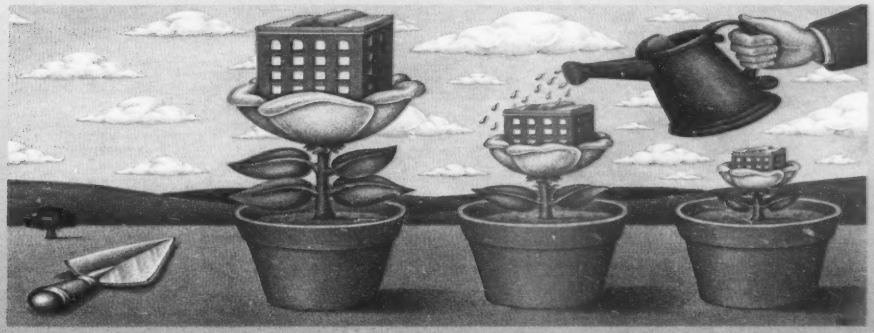

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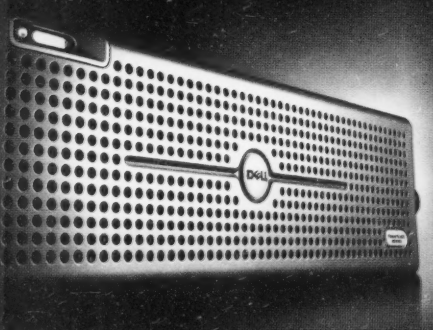

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